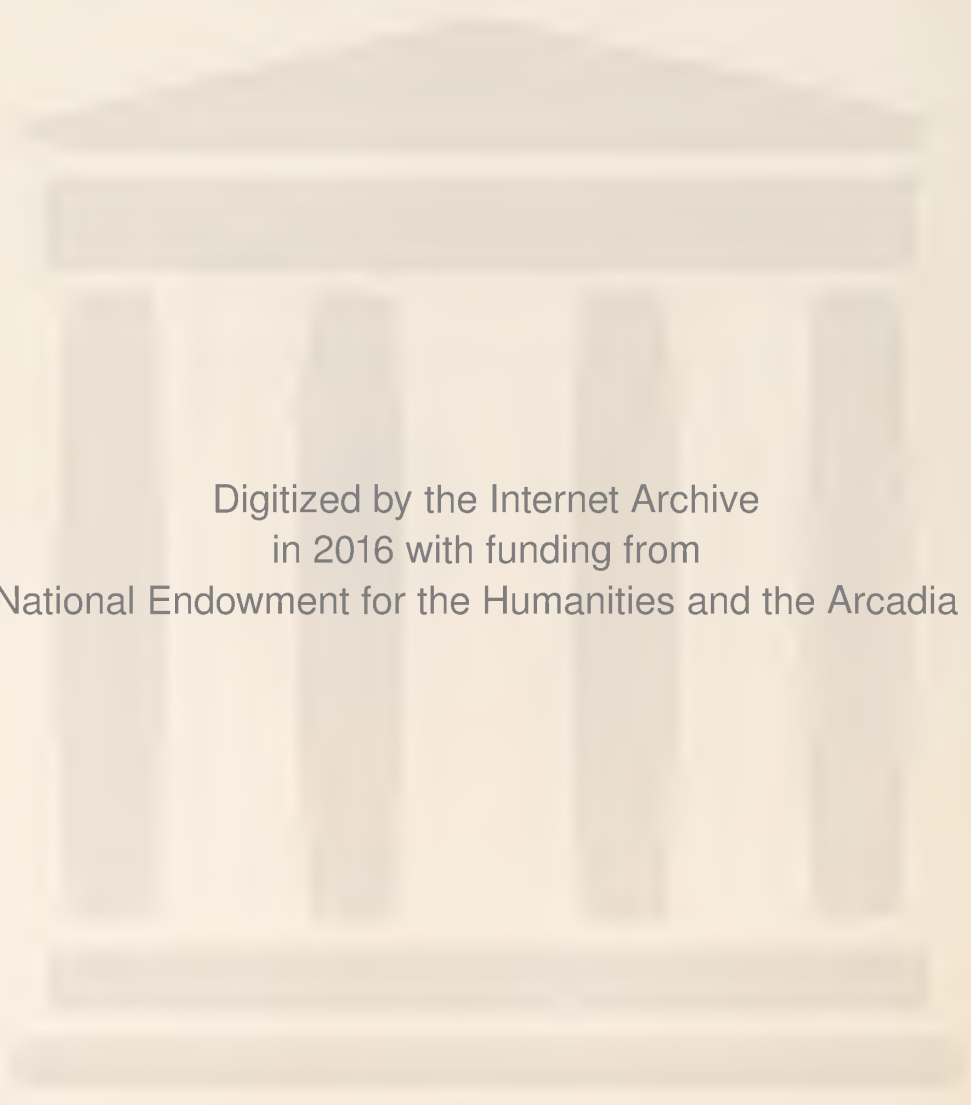


The New York
Academy of Medicine



By Exchange



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The negative power of undue anxiety
in congestive heart failure...

This man thinks he can no longer
take breathing for granted.

Typical of many patients with congestive heart failure, he also suffers from severe anxiety, a psychic factor that may influence the character and degree of his symptoms, such as dyspnea. His apprehension may also deprive him of the emotional calm so important in maintenance therapy.

Aid in rehabilitation

Specific medical and environmental measures are often enhanced by the antianxiety action of adjunctive Libritabs (chlordiazepoxide). Libritabs can also facilitate treatment of the tense convalescent patient until antianxiety therapy is no longer required. Whereas in geriatrics the *usual daily dosage* is 5 mg two to four times daily, the *initial dosage* in elderly and debilitated patients should be limited to 10 mg or less per day, adjusting as needed and tolerated.

Concomitant use with primary agents

Libritabs is used concomitantly with certain specific medications of other classes of drugs, such as cardiac glycosides, diuretics, antihypertensives, vasodilators and oral anticoagulants, whenever excessive anxiety or emotional tension adversely affects the clinical condition or response to therapy. Although clinical studies have not established a cause and effect relationship, physicians should be aware that variable effects on blood coagulation have been reported very rarely in patients receiving oral anticoagulants and chlordiazepoxide HCl.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Indicated when anxiety, tension and apprehension are significant components of the clinical profile.

Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.

Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

Supplied: Tablets containing 5 mg, 10 mg or 25 mg chlordiazepoxide.

The positive power of

Libritabs®
(chlordiazepoxide)

5-mg, 10-mg, 25-mg tablets

t.i.d./q.i.d.

up to 100 mg daily

for severe anxiety
accompanying
congestive heart failure



Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, N.J. 07110

The science of treating gas pain

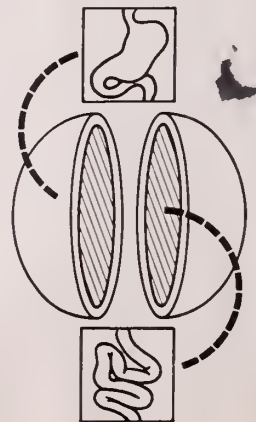
1. When gas is *entrapped* in the G.I. tract, it can cause pain severe enough to mimic that of peptic ulcer, angina pectoris, or myocardial infarction.^{1,2} **2.** Most of the gas symptoms brought to your attention will be due to gas trapped in the intestines, not the stomach. **3.** The source of most G.I. gas is air-swallowing, often an anxiety response of which the patient is unaware.

^{new} PHASIL[®] treats gas pain scientifically

1. Phasil is the only single-entity simethicone tablet with measured medication for both stomach and intestine. Phasil's protected inner core releases 40 gm. of *specially-activated* simethicone in the intestines, the most common site of gas entrapment. **2.** Phasil also releases 20 mg. of *specially-activated* simethicone while in transit through the stomach, for immediate dispersion of any gas accumulated there. **3.** Phasil is safe: no systemic effects, no untoward reactions, no contraindications.

Sig.: One Phasil tablet before meals and at bedtime provides reliable relief of gas pain, bloating and distention. Available in bottles of 100 tablets.

References: 1. Roth, J. L. *Ann. N.Y. Acad. Sci.* 150:109, Feb. 26, 1968. 2. Reich, N. E., and Fremont, R. E. (eds.) *Chest Pain*, The Macmillan Company, New York, 1961, p. 348.



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Pinworm therapy is often a family affair



Contraindications: History of hypersensitivity to thiabendazole.

Warnings: If hypersensitivity reactions occur, drug should be discontinued immediately and not resumed. Rarely, erythema multiforme has been associated with thiabendazole therapy; in severe cases (Stevens-Johnson syndrome), fatalities have occurred. Because CNS side effects may occur quite frequently, activities requiring mental alertness should be avoided. Safe use in pregnancy or lactation has not been established.

Precautions: Ideally, supportive therapy is indicated for anemic, dehydrated, or malnourished patients prior to initiation of anthelmintic therapy. In presence of hepatic or renal dysfunction,

patients should be carefully monitored.

Adverse Reactions: Most frequently encountered are anorexia, nausea, vomiting, and dizziness. Less frequently, diarrhea, epigastric distress, pruritus, weariness, drowsiness, giddiness, and headache have occurred. Rarely, tinnitus, hyperirritability, numbness, abnormal sensation in eyes, blurring of vision, xanthopsia; hypotension, collapse; enuresis; transient rise in cephalin flocculation and SGOT; perianal rash, cholestasis and parenchymal liver damage; hyperglycemia; transient leukopenia; malodor of the urine, crystalluria, hematuria; appearance of live *Ascaris* in the mouth and nose. Hypersensitivity reactions

A New Dosage Form:

Chewable Tablets 500 mg

Mintezol[®]

THIABENDAZOLE | MSD



so easy to take
everyone in the family
will keep to the
regimen you prescribe

include: fever, facial flush, chills, conjunctival injection, angioedema, anaphylaxis, skin rashes, erythema multiforme (including Stevens-Johnson syndrome), and lymphadenopathy.
Supplied: Chewable tablets, containing 500 mg thiabendazole, in boxes of 36, strip packaged, individually foil wrapped; Suspension, containing 500 mg thiabendazole per 5 cc, in bottles of 120 cc.

For more detailed information, consult your MSD representative or see the Direction Circular. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486

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addendum

INDICATION | DOSAGE SCHEDULE

MINTEZOL[®] (Thiabendazole, MSD) has demonstrated effectiveness against a broad spectrum of nematode infestations, whether encountered singly or in combination. Dosages are weight related; therefore, a weight-dose chart is included in the Direction Circular for your convenience when writing a prescription. MINTEZOL should be given after meals if possible.

INDICATIONS	DOSAGE (1st Day)	ADDITIONAL REGIMEN	COMMENTS
Pinworm disease	Two doses of 1 tablet/50 lb	Repeat 7 days later	This regimen is designed to reduce the risk of reinfection. However, if not practical, repeat the regimen the next day.
Threadworm,* large round-worm,* hookworm,* and whipworm* disease	Two doses of 1 tablet/50 lb	Repeat the next day	Alternatively, a single dose of 2 tablets/50 lb may be given. However, a higher incidence of side effects should be expected.
Creeping eruption	Two doses of 1 tablet/50 lb	Repeat the next day	If active lesions are still present 2 days after completing this regimen, a second course is recommended.
Symptoms of trichinosis* during the invasive phase of the disease	Two doses of 1 tablet/50 lb	Repeat for 2 to 4 successive days	The optimal dosage for the treatment of trichinosis has not been established.

The recommended maximal daily dosage is 3 g (6 tablets).

*Clinical experience with thiabendazole for treatment of each of these conditions in children weighing less than 30 lb has been limited.



**T₄ IS THE
PREDICTABLE
HORMONE BECAUSE
IT LOVES PROTEIN.**

SYNTHROID® (sodium levothyroxine) is pure synthetic T₄, the major circulating thyroid hormone. It is reliable to use because of its affinity for protein-binding sites in the blood. T₃ is more fickle. Sometimes it binds. Sometimes it doesn't. T₄ more *predictably* binds to protein.

Synthroid®
(sodium levothyroxine)

**ALL THYROID-
FUNCTION TESTS ARE
USEFUL IN
MONITORING
SYNTHROID THERAPY.**

No calculations are needed, test interpretation is simple.

Any of the commonly used T₄ thyroid function tests (P.B.I., T₄ By Column, Murphy-Pattee, Free Thyroxine) are useful in monitoring patients on T₄ because they *all* measure T₄. Patients on SYNTHROID are thereby easy to monitor because their results will fall within predictable, elevated test ranges. Of course, clinical assessment is the best criterion of the thyroid status of the drug-treated patient.

**TWO GOOD REASONS
WHY THE ROAD TO
NORMALIZED
THYROID STATUS IS
SO SMOOTH FOR THE
SYNTHROID PATIENT.**

(1) The onset of action of T₄ is gradual. It has a long in vivo "half-life" of over six days. (Occasional missed doses or accidental double-doses are of less concern because of this factor)¹; (2) since SYNTHROID contains only T₄, the potential for metabolic surges traceable to more potent iodides (T₃) is eliminated.

1. Latiolais, C. J., and Berry, C. C.: Misuse of Prescription Medications by Outpatients, *Drug Intelligence & Clin. Pharm.* 3:270-7, 1969.

TEST	HYPOTHYROID	SYNTHROID THERAPEUTIC NORMAL
P.B.I.	Less than 4 mcg %	6-10 mcg %
T ₄ By Column	Less than 3 mcg %	7-9 mcg %
T ₃ (Resin)	Less than 25%	27-35%
T ₃ (Red Cell)	Less than 11%	11.5-18%
Free Thyroxine	Less than 0.7 nanograms %	0.7-2.5 nanograms %
Murphy-Pattee	Less than 2.9 mcg %	4-11 mcg %

**Choose
the Smooth
Road ...to thyroid replacement therapy**



WHY DOES SYNTHROID COST LESS THAN SYNTHETIC DRUGS CONTAINING T₃?

Very simple. T₃ costs more to make synthetically than does T₄. So it is economically necessary for a synthetic thyroid medication containing T₃ to cost more than one containing T₄ alone. Synthetic combinations cost patients nearly 19% more than SYNTHROID³ because the T₃ costs more to start with; also there is the additional expense of formulating a tablet containing two active ingredients.

American Druggist BLUEBOOK, March, 1971.

KNOWLEDGE OF THE '70's CHALLENGES CUSTOMS CONCERNING DESICCATED THYROID DRUGS.

In the past, desiccated thyroid produced from animal glands was considered "good, and cheap." We now know that improved products are available and the price difference has narrowed to the point of being inconsequential. (SYNTHROID, for instance, costs patients about a penny a day more than brands of desiccated thyroid.)

What does this additional \$3.65 a year buy the patient? Quite a bit in terms of quality, reliability and service.

SWITCHING PATIENTS TO SYNTHROID IS EASY.

Switching present patients to SYNTHROID (or starting new ones) is a simple matter. SYNTHROID is available in the widest range of dosage strengths of any thyroid drug. Seven scored, color-coded tablet strengths are available plus a lyophilized injectable form for emergency or postoperative uses.

RESPONSE, RELIABILITY, SERVICE—COMPARISON OF FIVE PARAMETERS

PARAMETERS	DESICCATED THYROID U.S.P.	SYNTHROID® (sodium levothyroxine)
SOURCE OF HORMONE	Animal glands (swine, sheep, cows). Hormone content of glands and ratio of T ₃ -T ₄ varies by type of animal, season in which gland is harvested, and diet of animal. 1, 2, 3, 4, 5	Synthetically derived pure crystalline hormone. Because no animal protein is present, no objectionable odor occurs upon aging.
GENERAL ASSAY TECHNIQUE	"Its major disadvantage is inadequate standardization of hormonal content." ⁸	Unlike desiccated thyroid U.S.P., thyroxine does not require biologic standardization to establish its potency. 2, 6 Crystalline T ₄ is used. Purity is verified by paper chromatography. Content of tablets is standardized by weight.
CLINICAL RESPONSE	"T ₃ and T ₄ ratio varies according to gland source. Fluctuations in response can occur. Potency can vary." ³	"Sodium levothyroxine has been extensively used with satisfaction and is widely held to be superior to (desiccated) thyroid." ⁷ "There are well documented examples of patients who failed to respond satisfactorily to desiccated thyroid but subsequently responded to (sodium-1) thyroxine." ⁴
PREDICTABILITY	Failure of thyroid U.S.P. treated patients to show clinical improvement and/or lack of correlation in clinical findings to thyroid function test results has been frequently discussed in the literature. 8, 9, 10, 11, 12, 13, 14, 15, 16 Regardless of which factor or factors accounts for this phenomenon the fact remains that discrepancies do occur.	Test results predictably elevated. "... oral potency of this material is attested to by a uniformly good clinical response corroborated by a prompt and sustained increase in the serum PBI levels." ¹⁶

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PATIENTS CAN BE SUCCESSFULLY MAINTAINED ON A DRUG CONTAINING THYROXINE ALONE.

Thyroxine (T_4) is, as you know, the major circulating hormone produced by the thyroid gland. T_3 is also produced, in smaller amounts, and is active at the cellular level. For years it has been a working hypothesis among endocrinologists that T_4 is converted by the body to T_3 . In 1970 this process, called "deiodination," was demonstrated by Braverman, Ingbar, and Sterling². T_4 does convert to T_3 , though the precise quantities are still being studied.

The conversion has been clinically demonstrated during the administration of T_4 to athyrotic patients. Their thyroid status is normalized on SYNTHROID alone, yet the presence of T_3 in these patients has been clearly shown.

CONSIDERATE LONG-TERM THERAPY FOR THE PATIENT.

Predictable patient response, of course, is more important than price. You do get complete clinical response with the single-entity synthetic, SYNTHROID. And, at a reasonable cost to the patient. In some short term situations, T_3 drugs can be useful but, in long term therapy, the smooth road provided by SYNTHROID may be the better route.

SYNTHROID, with its smooth road to complete thyroid replacement therapy, has been selected for more patients in the United States and Canada than any other brand of thyroid medication.

2. Braverman, L. E., Ingbar, S. H., and Sterling, K.: Conversion of Thyroxine (T_4) to Triiodothyronine (T_3) in Athyrotic Human Subjects, *J. Clin. Invest.* 49:855-64, 1970.

AS WITH ANY THYROID PREPARATION, CAUTIOUS OBSERVATION OF THE PATIENT DURING THE BEGINNING OF THERAPY WILL ALERT THE PHYSICIAN TO ANY UNTOWARD EFFECTS.

Side effects, when they do occur, are related to excessive dosage. Caution should be exercised in administering the drug to patients with cardiovascular disease. Read the accompanying prescribing information for additional data or write Flint Laboratories.

Choose the Smooth Road ...to thyroid replacement therapy



0.05 mg.



0.1 mg.



0.15 mg.



0.2 mg.

FREE TAB-MINDER medication dispensers—color-coded in 4 dosage strengths—get patients off a good start and encourage regular habit patterns. Contain 4-weeks' supply of SYNTHROID and are reusable for maintenance.

Animal Gland					
CYTOMEL (Sodium liothyronine) Synthetic T ₃	EUTHROID** (Liotrix) Synthetic T ₃ -T ₄	THYROLAR*** (Liotrix) Synthetic T ₃ -T ₄	Desiccated (Thyroid, USP) Cow, sheep or hog thyroid	PROLOID (thyroglobulin) Frozen hog thyroid	SYNTHROID (Sodium levothyroxine) Synthetic T ₄
Unscored 5 mcg.	N.A.	N.A.	unscored ¼ gr.	¼ gr.	0.025 mg.
N.A.	½	½	unscored ½ gr.	½ gr.	0.05 mg.
25 mcg.	1	1	unscored 1 gr.	1 gr.	0.1 mg.
N.A.	N.A.	N.A.	N.A.	1½ gr.	0.15 mg.
50 mcg.	2	2	unscored 2 gr.	2 gr.	0.2 mg.
N.A.	3	3	unscored 3 gr.	3 gr.	0.3 mg.
N.A.	N.A.	N.A.	unscored 5 gr.	5 gr.	0.5 mg.
N.A.	N.A.	N.A.	N.A.	N.A.	Injectable 500 mcg.

N.A. = Not Available Commercially

*Equivalents shown are chemical, and do not take into consideration individual patient variables. Clinical effect is approximate and should be monitored when converting a patient to SYNTHROID. This is particularly important in patients previously on desiccated thyroid. In these patients, lower doses of SYNTHROID may produce the same metabolic effect.

**Euthroid (#1 tablet) contains 60 mcg. of T₄ and 15 mcg. of T₃.

***Thyrolar (#1 tablet) contains 50 mcg. of T₄ and 12.5 mcg. of T₃.

Synthroid®

(sodium levothyroxine)



Indications: SYNTHROID (sodium levothyroxine) is specific replacement therapy for diminished or absent thyroid function resulting from primary or secondary atrophy of the gland, congenital defect, surgery, excessive radiation, or antithyroid drugs. Indications for SYNTHROID (sodium levothyroxine) Tablets include myxedema, hypothyroidism without myxedema, hypothyroidism in pregnancy, pediatric and geriatric hypothyroidism, hypopituitary hypothyroidism, simple (nontoxic) goiter, and reproductive disorders associated with hypothyroidism. SYNTHROID (sodium levothyroxine) for Injection is indicated for intravenous use in myxedematous coma and other thyroid dysfunctions where rapid replacement of the hormone is required. The injection is also indicated for intramuscular use in cases where the oral route is suspect or contraindicated due to existing conditions or to absorption defects, and when a rapid onset of effect is not desired.

Precautions: As with other thyroid preparations, an overdosage may cause diarrhea or cramps, nervousness, tremors, tachycardia, vomiting and continued weight loss. These effects may begin after four or five days or may not become apparent for one to three weeks. Patients receiving the drug should be observed closely for signs of thyrotoxicosis. If indications of overdosage appear, discontinue medication for 2-6 days, then resume at a lower dosage level. In patients with diabetes mellitus, careful observations should be made for changes in insulin or other antidiabetic drug dosage requirements. If hypothyroidism is accompanied by adrenal insufficiency, as Addison's Disease (chronic subcortical insufficiency), Simmonds's Disease (panhypopituitarism) or Cushing's syndrome (hyperadrenalism), these dysfunctions must be corrected prior to and during SYNTHROID (sodium levothyroxine) administration. The drug should be administered with caution to patients with cardiovascular disease; development of chest pains or other aggravations of cardiovascular disease requires a reduction in dosage.

Contraindications: Thyrotoxicosis, acute myocardial infarction. **Side effects:** The effects of SYNTHROID (sodium levothyroxine) therapy are slow in being manifested. Side effects, when they do occur, are secondary to increased rates of body metabolism; sweating, heart palpitations with or without pain, leg cramps, and weight loss. Diarrhea, vomiting, and nervousness have also been observed. Myxedematous patients with heart disease have died from abrupt increases in dosage of thyroid drugs. Careful observation of the patient during the beginning of any thyroid therapy will alert the physician to any untoward effects.

In most cases with side effects, a reduction of dosage followed by a more gradual adjustment upward will result in a more accurate indication of the patient's dosage requirements without the appearance of side effects.

Dosage and Administration: The activity of a 0.1 mg. SYNTHROID (sodium levothyroxine) TABLET is equivalent to approximately one grain thyroid, U.S.P. Administer SYNTHROID tablets as a single daily dose, preferably after breakfast. In hypothyroidism without myxedema, the usual initial adult dose is 0.1 mg. daily, and may be increased by 0.1 mg. every 30 days until proper metabolic balance is attained. Clinical evaluation should be made monthly and PBI measurements about every 90 days. Final maintenance dosage will usually range from 0.2-0.4 mg. daily. In adult myxedema, starting dose should be 0.025 mg. daily. The dose may be increased to 0.05 mg. after two weeks and to 0.1 mg. at the end of a second two weeks. The daily dose may be further increased at two month intervals by 0.1 mg. until the optimum maintenance dose is reached (0.1-1.0 mg. daily).

Supplied: Tablets: 0.025 mg., 0.05 mg., 0.1 mg., 0.15 mg., 0.2 mg., 0.3 mg., 0.5 mg., scored and color-coded, in bottles of 100, 500, and 1000. Injection: 500 mcg. lyophilized active ingredient and 10 mg. of Mannitol, N.F., in 10 ml. single-dose vial, with 5 ml. vial of Sodium Chloride Injection, U.S.P., as a diluent. SYNTHROID (sodium levothyroxine) for Injection may be administered intravenously utilizing 200-400 mcg. of a solution containing 100 mcg. per ml. If significant improvement is not shown the following day, a repeat injection of 100-200 mcg. may be given.

THE FACTS ARE CLEAR AND HERE IS OUR OFFER.

Synthetic thyroid drugs are an improvement over animal gland products. Patients, even athyrotic ones, can be completely maintained on SYNTHROID (T₄) alone. Thyroid function tests are easy to interpret since they are *predictably* elevated when the patient adheres to SYNTHROID. Of all synthetic thyroid drugs, SYNTHROID is the most economical to the patient.



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DIVISION OF TRAVENOL LABORATORIES, INC.
Morton Grove, Illinois 60053

OFFER:

Free TAB-MINDER medication dispensers to start or convert all your hypothyroid patients to SYNTHROID. Free information to physicians on role of thyroid function tests in a new booklet titled: "Guideposts to Thyroid Therapy." Ask us.

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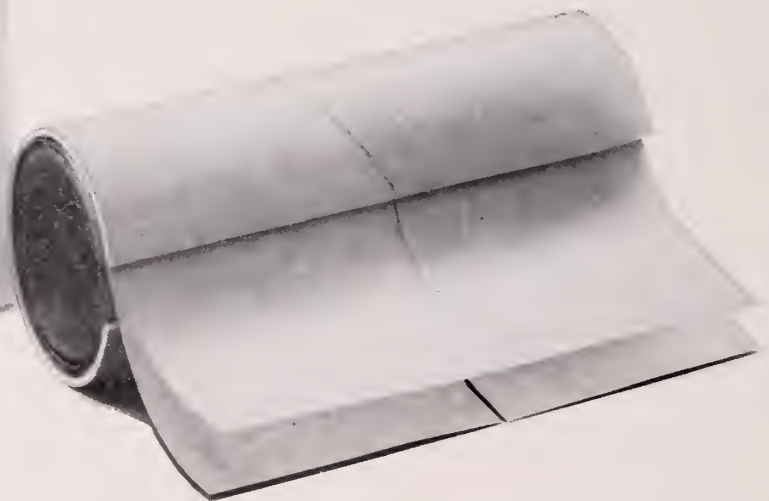
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One of the familiar line of Cordran[®] flurandrenolide products



*Additional information
available to the
profession on request.*

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Make 'Em Shoot Us: Strike!

NOW THERE is a dirty word . . . 'STRIKE'

Although it contains six letters, this word is more repugnant to physicians than any four letter word in the language. Certainly no moral, ethical human being would refuse to render aid to the sick, the injured, the dying. To propose such an outrage would be criminal.

However, in suggesting that physicians go on strike, I do not suggest that we refuse to care for our patients. As a matter of fact, by supporting a strike such as I propose, we would actually enlarge our capacity to care for patients. We would salvage hundreds of hours presently wasted with inane trivia. We would lose nothing not already lost. And we might exchange the slow painful strangulation of our independence which is, today, so plainly inevitable, for the quick, clean and resigned submission to retaliatory bondage. As it is now, we are participating in the plan for our own enslavement, promoting the abandonment of our own ethics and conspiring in a treason against our own profession.

For a beginning, let's announce that we will not participate in any peer review program that is compulsory, comprised of non-physician members or supervised by politicians and their appointees. It would be interesting if not amusing to view the proceedings of a professional standards review organization that included no professionals.

Let's resign from the utilization review committees in all our hospitals. It seems unlikely that anyone else would volunteer to assume the responsibilities and liabilities involved in deciding who will be hospitalized and for how long.

Let's advise our patients and their fiscal agents that we will no longer serve as intermediaries; that we will deal only with patients; that we will provide each of our patients a list of diagnoses and an itemized statement of charges and that all other re-

ports will be prepared and submitted by them or their representative; that we will accept only the amounts charged as full payment and that questions of underpayment, discounts, and delayed payment will be negotiated between the insurer and the insured; that responsibility for full payment is not contingent upon the patient's remuneration by his fiscal agent. Standing at auction is for livestock, not physicians.

Let's inform life insurance companies that we will no longer respond to their questionnaires about our patients; that we will, upon proper authorization by a patient whose account is current, make his record available for perusal by the company's representative, at a mutually convenient and designated time, in our offices. If they want the information, the effort should be theirs. We should not take time to function as insurance company clerks.

Let's affirm our authority in all our dealings with hospitals, extended care facilities and nursing homes; let's decide how much care each patient needs, and provide it; let's determine what records are essential to the patient's care and prepare them. Let's stop attending meetings, completing forms and submitting reports just because some remote committee has decided it is necessary to do so. It would be absolutely awesome to watch the various licensing, certifying and accrediting agencies revoke their blessings from every health care facility in this country.

Think of it . . . this kind of strike would be exciting, educational and rewarding. It would create terror in the hearts of the bureaucrats and generate esprit among physicians everywhere.

Best of all, such a strike would promote the welfare of our patients, decrease the costs of health care and prove the integrity of our profession.

To hell with the blindfold. STRIKE!
MRJ □



Some famous graffiti in California says, "The trouble with our country is the apathy." Then scrawled underneath is, "Yeah, but who cares?"

Gentlemen, we must not be guilty of apathy. The best estimate is that after the general elec-

tion some form of national health insurance will be enacted. If we lose, then we will all end up working for the government. For those of us who want to work for the government there is always the US Army, but some of us have tried that involuntarily and found it somewhat lacking as a lifetime career.

As physicians our greatest ambition is to be left alone in order to give more and better medical care to sick people. Given the current political climate, we are not going to be left alone. We must enter the political arena. The choice is ours, to participate and win, or be buried in a morass of government regulations and reports.

In order to win, it is imperative that we develop a Political War Chest. This year for the first time each family can deduct \$100.00 in political contributions. We expect every doctor in Oklahoma to contribute. The ideal mechanism for administering our War Chest is the Oklahoma Medical Political Action Committee. OMPAC has been very effective in the past and can be even more effective. This contribution may be the most important thing that we can do this year to save American medicine. OMPAC is not deductible but contributions to candidates are, so make your check payable to the candidate of your choice but send it to OMPAC so that it can be grouped with others to make an even greater impact on the candidate. Not only are we interested in elections to U.S. Congress, but our State Legislature has never been fully committed to excellence in medical education in Oklahoma. We, therefore, are intensely interest-

ed in these elections as well.

Other parts of our program are:

1. Join OMPAC if you have not already done so.

2. Each family can deduct \$100.00 donated to a campaign this year. By all means do.

3. The Medical Auxiliary has launched a statewide political effort. Encourage your wife to participate by having coffees and working in campaign headquarters of your legislative candidates.

4. Be sure your family, office staff and friends are registered to vote.

5. National estimates are that approximately 10% of the population is dissatisfied with their medical care. Unfortunately, these 10% are the ones who write their congressmen and senators. If we could get each doctor in the OSMA to encourage only 10 satisfied patients to write letters to congress, we could flood their mail with 23,000 letters extolling the virtues of the present system of free enterprise medicine. The patients, after all, have the biggest stake in preserving a private personalized health service. All of us have patients who are pleased with their doctor, so it is up to us to supply them with the names and addresses of Congressmen and instill in them the desire to write asking that the Federal Government preserve private personalized health care.

6. As the political year develops, we will ask the members to organize their letter writing potential to support or not support specific bills in the State Legislature and Congress.

7. If we can develop a War Chest with enough potential, it should increase tremendously the effectiveness of our legislative committee and in turn the effectiveness of our lobby at the State Capitol.

When I play golf, I hit the ball hard as I can. Sometimes I get a fantastic drive that even Arnold Palmer would be proud to claim as his own. Alas, sometimes I miss it completely and the only satisfaction is knowing that I tried as hard as I could.

When the coming battle over medical care in the United States is over, I want to be certain that I have tried as hard as I could. □

S.R. McCaughy, MD

Fetal Monitoring For the Community Hospital

WARREN M. CROSBY, MD

Fetal monitoring systems have emerged from the research laboratory and can now provide the protection of early warning of fetal distress during labor similar to that enjoyed by cardiac patients in coronary care unit.

INTRODUCTION

THE AVAILABILITY of methods and equipment for continuous monitoring of vital physiologic parameters in the human subject has resulted in improved care for patients with acute myocardial infarction, a variety of surgical conditions and certain types of cardio-pulmonary distress in newborn infants and adults. The proliferation of coronary, pulmonary, surgical and newborn intensive care units in community hospitals attests to the acceptance of such early warning systems by the medical profession and lay public alike. If continuous monitoring can be shown to improve maternal and fetal care, fetal monitoring systems should be made available in hospitals that care for patients in the most hazardous period of life . . . the time of being born.

Recent improvements in equipment have

brought fetal monitoring systems within reach of the community hospital, both in terms of cost and ease of application. The purpose of this communication is to evaluate available fetal monitoring systems and to discuss their usefulness in the community hospital.

METHODS

Monitoring systems are designed to measure continuously one or more physiologic parameters so that deviations from normal can be detected immediately. Monitoring the fetus presents problems not encountered in the adult: the only vital physiologic parameter that can be measured with ease and accuracy is cardiac activity. (Fetal capillary blood can be sampled during labor, and pH and blood gas tensions estimated. This technique is being used more frequently, but is still considered primarily a research procedure. Similarly, probes for direct insertion into fetal tissues to measure gas tensions or record the electroencephalogram during labor have yet to emerge from the research laboratory.) The fetal heart accelerates or decelerates in response to many stimuli, and the rate recorded is the sum total of these influences. No one has described wave form changes in electrocardiograms that are characteristic of fetal distress. Therefore observation of the fetal electrocardiogram during labor does not

provide early warning of fetal deterioration. The response of the fetal heart rate to uterine contractions, however, does provide such a warning. When the fetus is in good condition, the reduction in blood flow to the placenta during each contraction is well tolerated, and the fetal heart rate does not change. But if the fetus has become asphyxiated because of maternal or placental disease, the reduction in placental blood flow during a contraction will be accompanied by further asphyxia. The resultant myocardial anoxia slows the fetal heart rate. Fetal monitoring devices take advantage of this relationship between the fetal heart rate and uterine contractions in the compromised fetus. Commercially available fetal monitoring systems have two inputs, the fetal heart signal and uterine pressure:

A. Fetal Signal. The fetal heart signal may be acquired by (1) direct electrocardiograph leads, (2) ultrasound or (3) sensitive microphone. Because the fetal signal is not useful by itself (one could do almost as well with a stethoscope), it is translated into an instantaneous fetal heart rate by computer-like circuitry within the monitor. The electrocardiographic lead is clipped onto the fetal scalp with special forceps designed for the purpose. Use of direct fetal electrocardiography requires that the membranes be ruptured, that the cervix be over two centimeters dilated and the presenting part engaged. Ultrasonic transducers produce a quality recording of fetal heart rate nearly as good as the scalp electrode. These transducers send out a beam of low-energy ultrasound (sonar) that rebounds off various tissue interfaces within the body. If the beam rebounds from a moving surface such as the fetal ventricle, the frequency of the sound is changed, much as the frequency of a train whistle is changed by the train approaching or receding from a listener (Doppler principle). Electronic circuitry in the monitor filters out signals that return with their frequency unaltered; those signals returning with a higher or lower frequency are recognized as "motion" signals which usually represent the fetal heart. A microphone picks up sounds emanating from the uterus, the abdomen and the bedclothes. As

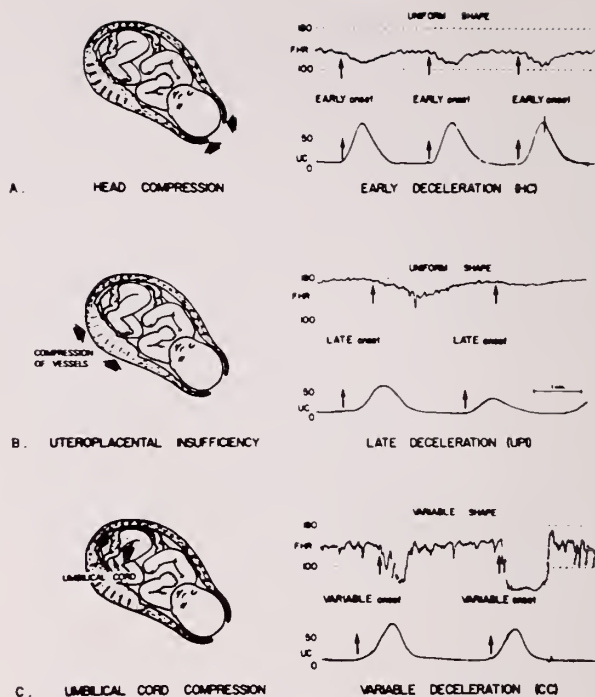


Fig. 1

recorded by the microphone, fetal heart sounds are often contaminated by extraneous noise from fetal movement, maternal changes in position or the movement of attendants in the room. However the fetal heart signals are acquired, they are translated into electrical impulses which are channeled through noise filters to the rate meter which records the fetal heart rate on the print out paper. (Fig. 1) The signal-to-noise ratio is highest (most satisfactory) with direct fetal electrocardiography and lowest with the microphone.

B. Uterine Pressure. Fetal heart rate changes vary widely during labor. Slow or rapid rates are generally of little prognostic value unless they can be related to uterine contractions or changes in uterine pressure. Uterine pressure may be obtained by direct catheterization of the uterine cavity by rupturing the membranes and sliding a catheter past the presenting part or by transabdominal needle puncture of the amniotic sac. (The latter is rarely done.) External devices—tocodynamometers—provide an estimate of internal uterine pressure by measuring the indentability of the uterus as it moves anteriorly during a contraction. These devices provide an estimate of uterine pressure but results are not as reliable or as ac-

curate as those obtained through direct catheterization. They have the distinct advantage of not requiring rupture of the membranes or internal manipulation. Uterine pressure is recorded on paper simultaneously with the fetal heart rate. In this way, the monitor provides a measure of the uterine pressure stimulus and the response of the fetus to that stimulus. The type of heart rate response to the stimulus of labor is an indication of the fetal condition.

Most monitoring systems provide both external and internal methods for measuring fetal heart rate and uterine pressure. The external system will find the more frequent use, but the results are quite variable and occasionally impossible to interpret. The internal system is less flexible, and because it requires the rupture of membranes, can be used only when labor is being induced or is in progress. The record from the internal system is less variable and easier to interpret, and this is of vital importance when the recording from external devices is not satisfactory. It is appropriate, therefore, to accept the additional costs involved in providing both systems.

The fetal heart rate and uterine pressure are recorded on graph paper. Most monitoring systems accomplish this by means of a strip chart recorder which draws a line on the graph at the appropriate heart rate and pressure. There is some variation between the various available monitor systems, but each has a fetal heart rate recording chart with a simultaneous recording of intrauterine pressure.

INTERPRETATION

In most cases, the recording will show little variation in fetal heart rate (FHR) during labor. If the FHR record remains straight, the fetus will not be asphyxiated at birth.¹ Various patterns of change in FHR may be observed during labor. There is lack of agreement as to the exact meaning of some of the observed patterns. However there is some consensus about the following patterns:

A. Early deceleration. ("Head compression pattern," Fig. 1A): Characterized by a fall in fetal heart rate that coincides with the onset of the contraction and returns to

the original rate within 15 seconds of the end of the contraction. The pattern is of uniform shape and reflects the shape of the uterine contraction curve. It can be eliminated by administration of atropine, implying that it is related to an increase in fetal vagal tone during contractions. Even with marked bradycardia (FHR below 90/min.) at the peak of the uterine contraction, the fetus is rarely adversely affected when the rate returns to baseline levels by the end of the contraction.²

B. Variable deceleration ("Umbilical cord compression pattern," Fig. 1C): This pattern is of variable shape, not reflecting the shape of the associated uterine pressure curve. The onset may occur at any time during the contraction, but the rate does not return to normal until after the uterine contraction is over. This pattern has been observed in conjunction with umbilical cord compression in experiments on fetal goats³ and in human patients with cord prolapse.⁴ That one cannot see or feel the cord on vaginal examination does not mean that compression has not occurred. The compression may have occurred within the uterus beyond the reach of the examiner. Unfortunately, not all fetuses with cord compression have this pattern during labor, nor is every fetus demonstrating this pattern born with asphyxia. But when more than 30% of contractions are associated with variable deceleration, there is a significant increase in the risk of fetal asphyxia at birth.⁵

C. Late deceleration ("Uteroplacental insufficiency pattern," Fig. 1B): This pattern, like that of early deceleration, is of uniform

A 1957 graduate of the Kansas University School of Medicine, Warren M. Crosby, MD, is presently Professor of the Department of Gynecology and Obstetrics at the University of Oklahoma Health Sciences Center. Certified by the American Board of Obstetricians and Gynecologists, Doctor Crosby is a member of the American College of Obstetricians and Gynecologists, the Association of Professors of Gynecology and Obstetrics, the Alpha Omega Alpha, the Central Association of Obstetricians and Gynecologists and the Society for Gynecologic Investigation.

shape and reflects the shape of the associated uterine pressure curve, but usually has its onset 15-20 seconds after the onset of the contraction, and bradycardia always persists well beyond the end of the uterine contraction when it returns to the baseline.

Late deceleration patterns are most frequently observed with maternal diseases characterized by reduced uteroplacental blood flow (diabetes, hypertension, toxemia, maternal hypotension). The pattern is not abolished by atropine, suggesting that it is produced by both myocardial and central nervous system depression. When "severe" late decelerations are observed in association with 30% or more of uterine contractions and the pattern persists for 30 minutes or longer, significant asphyxia occurs in 80% of fetuses.² "Severe deceleration" is defined as a drop in fetal heart rate of over 50 beats per minute for longer than 60 seconds.

TREATMENT

When the fetal heart rate recording demonstrates more than the normal 5-15 beats per minute variation, interpretation of the abnormal pattern is required. Early decelerations that return to baseline within 15-20 seconds of the end of a contraction are benign. Treatment is not necessary. Variable deceleration and late deceleration are often associated with fetal distress. Most authorities suggest that these patterns will not be accompanied by life-threatening asphyxia if delivery or elimination of the abnormal pattern occurs within 30 minutes of its first appearance. If the pattern is not eliminated, asphyxia deepens and the fetus may die if not delivered within 30-60 minutes. When variable or late deceleration is first recognized, the physician should notify the obstetrical staff to prepare for cesarean section, a process that takes 25-40 minutes in most hospitals. While preparations are being made, the patient is put in the left lateral recumbent position, and oxygen is administered by mask. If 30% of the contractions are associated with "severe" decelerations and these are not eliminated within 30 minutes by repositioning and oxygen ad-

ministration, cesarean delivery should be performed. Variable deceleration patterns often respond to these simple measures, and cesarean section may be avoided even though marked bradycardia was present initially. Severe late deceleration is a more ominous pattern; reposition and oxygen administration are less often followed by improvement in the pattern. The expected fetal mortality in such situations is high; cesarean section often will be necessary.

DISCUSSION

The use of fetal monitoring of the type described may permit earlier and more accurate detection of fetal distress and appropriate therapy. Hon⁶ has shown that normal non-monitored patients with fetuses of 1500 grams or more had an intrapartum death rate of 2.3/1000, as compared with a rate of 1.6/1000 among high-risk patients that were monitored. The expected intrapartum death rate in high risk patients on his service is several fold higher than the normal group. Saling reported a decrease in perinatal mortality from eight percent among non-monitored high-risk patients to two percent with the use of the monitor.⁷ These figures have not been subjected to statistical analysis because of lack of suitable controls. However, it is possible that the major beneficial effect of fetal monitoring is not the precision of diagnosis and treatment of fetal distress but the generally improved maternal care resulting when the presence of a monitor focuses greater attention of the obstetrical staff on the patient. Another effect of fetal monitoring is a *reduction* in the number of cesarean sections performed for fetal distress.⁴ This unexpected finding is attributed to the fact that the isolated observation of a fetal heart rate below 90 beats per minute has long been used as an indication of fetal distress that is best treated by emergency cesarean section. Experience with continuously monitored patients has shown that isolated instances of bradycardia are seen often in the absence of fetal asphyxia.²

Although a large controlled study to provide statistical proof of an improved perinatal mortality may never be done,⁸ most experienced observers believe that fetal mon-

itoring is beneficial and cite the following advantages:

1. Fetal distress is detected earlier and with greater accuracy than with other methods.

2. Abnormal labor patterns may be detected and treated before the clinical diagnosis is made apparent by cessation of the progress of labor.

3. Unnecessary cesarean section for fetal distress suggested by a single and benign instance of fetal bradycardia may be avoided.

4. The obstetrical staff, both nurses and physicians, pay more attention to monitored patients.

5. The patient and her husband are usually reassured by the use of the monitor.

The monitor has also been said to have the following disadvantages:

1. There have been reports of areas of necrosis of the fetal scalp by the scalp electrode.

2. Perforation of the uterus by the intrauterine catheter.⁹

3. Equipment failure.

4. Poor patient and physician acceptance because of difficulty introducing the scalp electrode or the intrauterine catheter.

Is the monitor a useful and important instrument that every obstetrical unit should have, or is it a new-fangled gadget that will pass quickly from the scene? The monitor will not save lives by itself. It may do more harm than good if the machine is left to "monitor" the labor while the nurse retires to the coffee shop. It does permit detection of fetal distress and abnormal labor earlier and with greater accuracy than clinical methods.

Fetal monitoring is of most use in the high-risk patient. Such high risk situations include maternal diabetes, heart disease, hypertension and toxemia, post maturity beyond 42 weeks, premature labor, elective induction of labor, Rh isoimmunization and elderly primigravidas. Mothers with many of these conditions know they have a greater chance of losing their baby during labor, and they appreciate that additional precautions are being taken to insure the best possible outcome. Other higher risk factors that arise during labor are delayed progress because of hypotonic or hypertonic uterine

inertia, contracted pelvis or abnormal presentation of the fetus. (Breech presentation is not a contraindication—the "scalp electrode" fits on the buttocks equally well.)

As monitors are included in the labor suite, additional uses have been found for them. Nurses are often given the responsibility of "watching the patient" during the induction of labor. Most do not relish this responsibility and welcome the monitor as a better means of following the progress of the induction. At least one hospital has reported a reduction in the use of intramuscular oxytocin or sparteine sulfate and an increase in the safer use of intravenous dilute oxytocin because the fetal monitor was used in each induction of labor.¹⁰

Other reports of fetal monitoring have shown that in extremely high risk situations (severe diabetes, chronic hypertensive disorders, severe Rh isoimmunization, etc.) the external monitor may be used to test the ability of the fetus to withstand forthcoming labor. An "oxytocin challenge test" is begun by recording the uterine activity and fetal heart rate by external devices for 30 minutes prior to the test. At the conclusion of this baseline period, dilute oxytocin (2.5 IU/1000 ml 5% glucose in water) is begun intravenously, and the dosage increased until five minute uterine contractions of 30 mm Hg or above are produced for 30 minutes. If late or variable decelerations occur with more than 30% of these contractions, the fetus is unlikely to survive normal or induced labor. A cesarean section is advised.⁵

But most obstetrical patients are not "high risk." Are there any advantages to these patients of having a fetal monitor available for them? Approximately five percent of otherwise normal patients will develop an abnormality of labor.¹¹ An additional one percent will have meconium stained amniotic fluid, and a few more (the number is difficult to estimate with accuracy) will be discovered to have an unexpected fetal bradycardia during labor. In other words, it is not uncommon for a "normal" patient to become a "high risk" patient during labor. If the monitor is useful for high risk situations, an excellent case can be made for its availability for all obstetrical patients.

The greatest deterrent to the use of the

Monitoring / CROSBY

fetal monitor in the community hospital is the lack of someone sufficiently trained in the interpretation of abnormal patterns. A similar problem was present when electrocardiographic diagnosis, and later coronary care monitoring, was introduced. These problems were solved by more widespread training in electrocardiography and by the development of long distance data transmission by telephone. It is unlikely, nor is it to be expected, that every physician who accepts obstetrical patients will devote the time and energy necessary to develop expertise in the technical interpretation of abnormal FHR patterns during labor. The entire output of the fetal monitor can be transmitted by telephone to a center where trained personnel are available. In Oklahoma, telephone transmission of electrocardiograph signals to regional centers for coronary care monitoring was introduced in 1969, and will become a self-sustaining service for many community hospitals this summer. A similar service for intermittent consultation for fetal monitoring is feasible today. The University of Oklahoma Health Sciences Center will be able to provide such service in the near future.

SUMMARY AND CONCLUSIONS

Fetal monitoring has been reviewed from the standpoint of equipment requirements and usefulness in the community hospital. There remains some question as to the exact meanings of some of the patterns produced by the monitor, and hence a similar lack of

agreement as to the most appropriate treatment. The patterns associated with the greatest fetal risk are late or variable deceleration patterns in which more than 30% of contractions are associated with decelerations of greater than 50 beats per minute for longer than 60 seconds. Under these circumstances, preparations should be made for cesarean section. If treatment, consisting of positioning the patient in the left lateral recumbent position and oxygen administration, does not abolish the deceleration patterns within 30 minutes, cesarean section is suggested. There is good acceptance of fetal monitoring, particularly with external transducers, by both patients and staff. The greatest deterrent to use of fetal monitoring by community hospitals is lack of someone trained in pattern interpretation. Telephone data transmission to a regional center for consultation is suggested as a solution to this problem. □

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The Use of Adrenal Corticosteroids in the Management of Meningitis

VICTOR B. ABELLO, MD
HARRIS D. RILEY, JR., MD

Adrenal corticosteroids have not yet found their definite place in the management of meningitis. We have reported here two cases believed to have benefited from its use.

ALTHOUGH MORTALITY rates from purulent and tuberculous meningitis have been markedly reduced in recent years following the advent of antibiotic therapy, a significant number of patients with these diseases are left with serious neurological sequelae.^{1-12, 13, 15-19, 36, 46, 47, 51, 52} One of these is adhesions within the arachnoid space and subsequent obstructive hydrocephalus secondary to post-inflammatory fibrosis at the base of the brain. Since adrenal steroids have a lytic influence on inflammatory exudates, it is reasonable to assume that their use in selected cases of meningitis may prevent this complication. It is the purpose of this report to present two patients with meningitis in whom the use of adrenal steroids appeared instrumental in preventing the development and in the treatment of obstructive hydro-

cephalus, and to review various aspects of this complication of meningitis.

CASE REPORTS

Case 1:

S. D., an 8-month-old white female, was in good health until one month prior to admission when she developed bilateral otitis media. Despite treatment with penicillin she continued to exhibit low grade fever, irritability, anorexia, occasional vomiting, and cough. Four days prior to admission a chest roentgenogram revealed a hilar infiltrate, and a tuberculin skin test with PPD (0.0001 mg) was strongly positive. There were no known exposures to tuberculosis. Skin testing of other family members revealed that her father had a positive tuberculin skin test but his chest roentgenogram was normal. Two days prior to her admission to Children's Memorial Hospital, the patient developed nuchal rigidity.

Past history revealed that she had been the product of a full-term, uncomplicated pregnancy, labor and delivery. She had received DPT and poliomyelitis immunizations. Psychomotor development had been within normal limits and she had experienced no significant illnesses. Physical examination revealed an acutely ill 8-month-old infant. Temperature was 102.6°F (R), pulse 160/min and respirations 40/min. The head circumference measured 45.1 cm.

From the Department of Pediatrics, Children's Memorial Hospital, University of Oklahoma Health Sciences Center, Oklahoma City.

Meningitis / ABELLO, RILEY

The pupils were equal in size and reacted normally to light. Extraocular movements and funduscopy findings were also normal. There was marked nuchal rigidity and Kernig and Brudzinski signs were present. Muscle stretch reflexes were hyperactive and symmetrical. The remainder of the general physical and neurological findings was unremarkable.

Laboratory tests showed a normal urine, hemoglobin 9.5 gm/100 ml. Leukocyte count was 17,300/cu mm with a normal differential. Histoplasmin and coccidioidin skin tests were negative. Because of the markedly positive reaction to intermediate test strength PPD which had been performed previously, the tuberculin skin test was not repeated. Examination of the cerebrospinal fluid revealed thick, xanthochromic spinal fluid under increased pressure with 47 lymphocytes/cu mm and 142 red cells/cu mm; a protein level greater than 7,000 mg/100 ml and a glucose level of 33 mg/100 ml with a blood glucose level of 50 mg/100 ml. Cultures of the spinal fluid, including those for acid fast bacilli, were subsequently reported to be negative. A roentgenogram of the chest showed hilar and parenchymal infiltration. Roentgenograms of the skull and mastoid showed no abnormalities.

The initial diagnostic impression was that the patient had tuberculous meningitis, and she was started on a program of isoniazid (INH) 150 mg/day, and para-aminosalicylic acid 4 gm/day given orally and streptomycin 1 gm/day intramuscularly. In addition, she was given 50 mg of pyridoxine daily.

During the three days following admission, her level of consciousness continued to deteriorate; she developed both generalized and focal seizures and became semi-comatose.

A second examination of the cerebrospinal fluid performed six days after admission revealed no significant change in the protein content. At this time, it was decided to initiate therapy with adrenal steroids in an attempt to reduce the inflammatory reaction in the meninges and thereby to prevent the possible development of arachnoidal adhesions. From the eighth to the eighteenth day

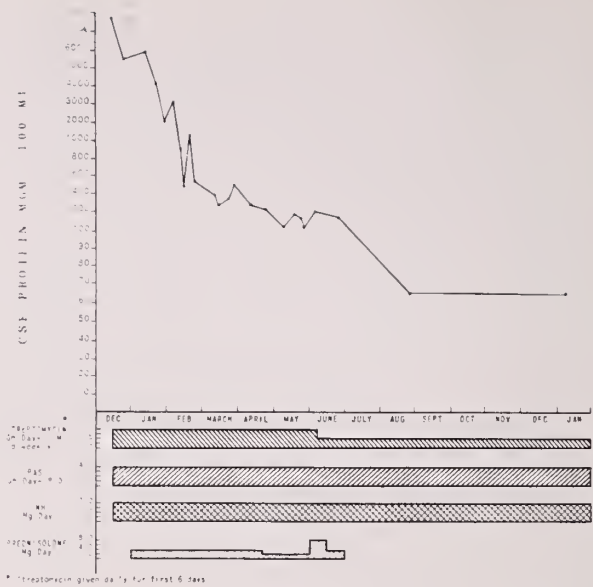


Figure 1. Course of a child with tuberculous meningitis showing the decrease in CSF protein in relation to therapy.

of hospitalization, the patient was given prednisolone at a dose of 2.5 mg every other day, intrathecally. During this time the patient slowly began to improve as manifested by diminution in lethargy, vomiting and signs of meningeal irritation. Subsequently, prednisolone was administered parenterally and continued for 170 days along with specific antituberculous chemotherapy. Spinal fluid examinations carried out at regular intervals showed a progressive decrease in the level of spinal fluid protein as illustrated in Figure 1. The decrease in protein levels was accompanied by a rise of spinal fluid sugar content to normal values. The patient's general condition began to improve and signs of meningeal irritation decreased in severity. Within two weeks following admission, she had become afebrile and considerably more alert. Measurements of the head circumference at regular intervals revealed a normal rate of growth. She continued to improve and three months following admission (11 months of age), she began to stand. One month later, she began to talk.

At the time of discharge from the hospital, 5.5 months after admission, the physical, ophthalmological and audiometric examinations revealed no abnormalities. Since her discharge, she has been followed at regular intervals in the Pediatric Outpatient Clinic. Her psychomotor development has

remained within normal limits. An electroencephalogram done approximately one year after the onset of her disease showed mild generalized slowing for her age. At two years and ten months of age, the Cattell Intelligence Scale revealed a mental age of two years and two months. The patient's verbal abilities were considered appropriate for her chronological age. A slight difficulty with visual-motor tasks was considered not to be unusual for a young child who had been hospitalized for such a prolonged period of time.

Case 2:

D. A. W., a 5-month-old white female, was in good health until four days prior to admission to the Children's Memorial Hospital when she developed fever and became anorexic, lethargic and had repeated episodes of generalized clonic convulsions. Past history revealed that she had been the product of a full-term, uncomplicated pregnancy, labor and delivery. She had received two DPT and poliomyelitis immunizations. Early milestones of psychomotor development had been reached at an average age.

On admission to the hospital, the patient was semi-comatose and exhibited intermittent, clonic convulsions. The anterior fontanelle was tense and bulging. The neck was stiff and Kernig and Brudzinski signs were present. The eyes were fixed and deviated to the right and the pupils were equal and reacted slowly to light. Funduscopic findings were normal. The remainder of the general physical and neurological findings was also normal.

Laboratory studies on admission revealed a normal urine, a hemoglobin of 9.0 gm/100 ml, a white blood cell count of 41,000/cu mm with 82% polymorphonuclear cells and 18% lymphocytes. Serum electrolytes were as follows: sodium, 137 mEq/liter, potassium, 5.4 mEq/liter, carbon dioxide, 18.3 mEq/liter and chloride, 101 mEq/liter. Tuberculin and histoplasmin skin tests were negative.

Examination of the cerebrospinal fluid showed purulent fluid containing 1,020 leukocytes/cu mm with 320 polymorphonuclear cells/cu mm and 700 lymphocytes/cu mm; a protein level too high to read, and a glucose level of less than 10 mg/100 ml; gram

stain revealed gram-negative pleomorphic organisms and cultures grew *Hemophilus influenzae*.

Initially she was treated with penicillin, 4.0 million units per day, chloramphenicol 700 mg/day and sodium sulfadiazine 700 mg/day, all administered intravenously. Penicillin was discontinued on the fourth hospital day when the causative organism was identified in the cultures obtained on admission. Although fever subsided on the second hospital day, she continued to exhibit intermittent clonic convulsions, conjugate deviation of the eyes to the right and vomiting of "coffee ground" material. Subdural punctures done on the second and seventh hospital day, yielded four drops of thick yellow purulent fluid from the left side. At this time, the patient began taking small amounts of fluids orally, but continued to assume an opisthotonic position with nuchal rigidity and was unaware of all but painful stimuli. On the thirteenth hospital day, a third subdural aspiration on the left yielded three milliliters of clear, xanthochromic fluid. Serial measurements of the head circumference revealed an abnormal increase of about two millimeters per day or a total of 3.0 cm since admission. A ventricular puncture done on the fourteenth day yielded xanthochromic fluid with a protein content of 2,300 mg/100 ml and a lumbar puncture yielded only a small amount of clear fluid with a protein content of 42 mg/100 ml. Based on these findings, it was as-

Victor B. Abello, MD, was graduated from the College of Medicine, University of the Philippines, Manila, in 1965. He is presently with the Department of Pediatrics at the University of Oklahoma Health Sciences Center.

Harris D. Riley, Jr., MD, was graduated from Vanderbilt University School of Medicine in 1948. He is now Professor of Pediatrics and Pediatrician-in-Chief of the Children's Memorial Hospital, University of Oklahoma Health Sciences Center in Oklahoma City. Certified by the American Board of Pediatrics, Doctor Riley is a member of the Society For Pediatric Research, the American Pediatric Society and the Infectious Disease Society of America.

sumed that the patient had developed a sub-arachnoid block and for this reason prednisolone, 4 mg/day, intramuscularly was begun. Following the initiation of steroid therapy, the signs of meningeal irritation gradually disappeared and the patient became aware of and responsive to environmental stimuli. While on prednisolone therapy, the protein content of the ventricular fluid decreased progressively from 2,300 mg/100 ml on the thirteenth hospital day to 20 mg/100 ml on the twenty-ninth hospital day. Spinal fluid dynamics and sugar content also returned to normal. Concomitantly with a fall in the protein content in the ventricular fluid, the head circumference began to decrease. The serial changes in head circumference, ventricular and spinal fluids are shown in Table 1.

The patient continued to improve and at the time of discharge, 46 days after admission, examination revealed a normal 6 month old infant who was able to hold her head up, to roll over, and who attempted to sit up. Her head circumference was 40.6 cm and her weight was 14 lbs., 12 oz.

Follow-up examination at seven months of age revealed a normal infant who was able to sit without support. Head circumference was 40.5 cm. Shortly thereafter her family moved from this community and the child has been lost to follow-up. Information from the local physician indicates that she is asymptomatic and that she has continued to develop normally.

DISCUSSION

Prior to the development of antibacterial

therapy, tuberculous meningitis was almost invariably fatal and purulent meningitis was accompanied by a high death rate.¹⁻⁵ Despite the availability of effective therapeutic agents, the mortality rate of tuberculous meningitis is still significant and the incidence of neurological and mental sequelae among survivors is quite high.⁴⁷ Although the incidence of death and serious sequelae is lower than that of tuberculous meningitis, the rates following purulent meningitis are still quite significant and have not changed significantly in the past two decades.⁴⁶ A large number of survivors of meningitis demonstrate neurosensory sequelae of varying degrees of severity. One of the most serious of these is obstructive hydrocephalus.

The incidence of neurologic sequelae following tuberculous and purulent meningitis varies widely according to different workers.⁶⁻¹⁹ While some of the more serious sequelae are easily recognized at the time of discharge from the hospital, others can be found in careful follow-up of the patients months or even years later. Many factors determine the frequency and type of sequelae: Duration of follow-up, age of the child when examined, sensitivity of the tests employed, and other factors.⁴⁸

The mortality rate of tuberculous meningitis ranges from 10 to 50% in different series of treated cases.^{47, 51} The incidence of neurologic sequelae in survivors varies greatly and depends on many factors, especially the stage of the illness when therapy started. Todd and Neville¹⁵ reported that 24% of the survivors of tuberculous meningitis had major neurological defects. Of 25 patients at the Children's Memorial Hospital, University of Oklahoma Health Sciences

Table I.
SERIAL CHANGES IN SPINAL AND VENTRICULAR FLUIDS AND HEAD CIRCUMFERENCE
IN A CHILD WITH H. INFLUENZAE MENINGITIS

Hospital Day	Source of Specimen	Description of Fluid	WBC/CMM	Protein mg/100 ml	Sugar mg/100 ml	Culture	Head Circumference cm.
1	Lumbar	Purulent	1,020	7,000	10	H. influenzae	36.5
13	Ventricular	Xanthochromic	830	2,300	43	Sterile	40.5
14	Lumbar	Clear	16	42	—	Sterile	41.0
17	Ventricular	Xanthochromic	3,060	392	—	Sterile	42.0
22	Lumbar	Clear	6	35	54	Sterile	40.0
22	Ventricular	Xanthochromic	255	QNS	QNS	Sterile	40.0
27	Lumbar	Clear	2	15	QNS	Sterile	40.0
30	Ventricular	Clear	7	20	60	Sterile	40.5
38	Lumbar	Clear	20	20	56	Sterile	40.5

Center surviving tuberculous meningitis over a 20 year period, 13 had neurologic sequelae of varying severity, including four with obstructive hydrocephalus.⁵¹ In a review of the cases of tuberculous meningitis seen at Bellvue Hospital, Lincoln¹⁹ found an incidence of hydrocephalus of 16%.

Despite the best available antimicrobial and supportive therapy the mortality in acute purulent meningitis in children is between 8 and 15%.³⁶ It is even higher in the neonatal period, ranging from 50 to 90%.⁴⁶ Belsey et al³⁶ reported that serious neurologic sequelae develop in 10-20% of survivors of purulent meningitis. Weiike *et al*⁵² reported on the outcome of 194 patients (excluding neonates) with acute purulent meningitis. Of this number, 11.9% died and 9.4% had neurologic sequelae. The mortality was significantly greater in infants one month to one year of age at the time of onset than in those older than one year—19.3% as compared to 5.7%. However, the incidence of neurologic sequelae in these two age groups was not statistically significant. As in other studies, the incidence of neurologic sequelae was highest after pneumococcal meningitis (19.4%), intermediate after *H. influenzae* meningitis (11.7%) and lowest after meningococcal meningitis (4.2%) and meningitis of unknown etiology (3.1%), respectively. Of 60 patients surviving *H. influenzae* meningitis, seven had neurologic sequelae, including one with hydrocephalus. A recent summary of follow-up studies of post-meningitic children concluded that over 18% suffer from lasting sequelae, 7% are mentally retarded and others manifest neurologic signs such as deafness, hemiplegia and speech disorders.⁴⁹ In general, neurologic sequelae occur more frequently in children who develop meningitis during the neonatal period and during the first few years of life.⁵⁶

The incidence of hydrocephalus following bacterial meningitis in several series of treated patients during the past 20 years has varied considerably.^{17, 58-61} The incidence in 766 cases was approximately 2%, but in one series⁶¹ was 3.8%. In contrast to older children, 31% of 55 survivors of neonatal meningitis developed overt hydrocephalus.⁶²

Lawrence,^{20, 21} reported that 23% of 182 unselected and untreated cases of hydro-

cephalus were secondary to central nervous system infections.

Since introduced as therapeutic agents in 1949, substantial interest has arisen in the use of adrenal corticosteroids as a supplement to antimicrobial therapy in serious infections. The use of steroids in acute meningitis has been proposed on the basis of several experimental studies,^{41, 42} by clinical experience in tuberculous meningitis^{23-26, 35} and by the numerous reports of its beneficial effect in individual patients or in uncontrolled series of patients.^{32, 33, 54} In purulent meningitis their use has been postulated as a means of treating circulatory collapse, reducing cerebral edema and of lessening residual neurologic drainage by decreasing inflammation and fibrosis.

It is postulated that hydrocephalus secondary to inflammatory arachnoiditis producing obstruction to the CSF circulation would have developed in the two children described in this report without the use of adrenal corticosteroid therapy. Obviously this belief is only speculative because of the small number of cases and the lack of controls receiving adrenal steroids or receiving other types of therapy aimed at abolishing or preventing the CSF obstruction. It seems quite likely that Patient 1 (S.D.) with tuberculous meningitis would have developed obstruction to the flow of CSF and subsequently, obstructive hydrocephalus, because of the marked elevation of the protein content of the CSF (greater than 7000 mg/100 ml) at the time she was first seen. Following the institution of adrenal steroid therapy, there was a prompt and sustained decrease in the protein content of the CSF. Of course, the question can be raised as to whether the protein content would have decreased in such a fashion as a result of the antituberculous chemotherapy rather than from the effect of the steroids. However, such has not been the finding expected in our clinic. In a large series of cases of tuberculous meningitis followed in this clinic which did not receive steroid therapy, there was a striking tendency for the protein content of the CSF to continue to rise for several days (average two weeks) after the initiation of anti-tuberculous therapy.⁵¹ Ghosh et al⁵⁰ reported in a controlled study a more rapid lowering of the CSF protein

content in patients with tuberculous meningitis who received steroids and antimicrobics than in those who received antituberculous chemotherapy alone. Patient 2 (D.A.W.) with *H. influenzae* meningitis clearly had a subarachnoid block as shown by the presence, on the thirteenth hospital day, of a markedly elevated protein content in the ventricular fluid and an essentially normal content in CSF removed from the lumbar area. Following the institution of adrenal steroid therapy, there was a dramatic lowering of the protein content to normal levels in a period of 16 days, a sequence which would not have been expected from our experience. Furthermore, the rate of increase of head circumference promptly slowed.

In our two patients, the regimen included prednisolone 2.5 mg intrathecally every other day for five times followed by 3.8 mg intramuscularly in Case 1 and 4 mg intramuscularly in Case 2. In our first patient, because of the slow decrease in spinal fluid protein, prednisolone was continued for the entire period of hospitalization (170 days). In the second case in which the protein levels in the spinal fluid returned to normal and the patient improved in four weeks, prednisolone was progressively tapered and discontinued after 16 days use.

Although the exact mechanism of action has not been established, it is well known that cerebral edema and increased intracranial pressure due to various causes often respond favorably to the administration of corticosteroids.^{39, 40} The anti-inflammatory effect of steroids is also well documented.^{41, 42} As anti-inflammatory agents, they inhibit not only capillary dilatation, fibrin deposition, migration of phagocytes and phagocytic activity but also the late manifestations of inflammation such as capillary and fibroblast proliferation, deposition of collagen and scar formation. This anti-inflammatory action of steroids and their effect on tuberculous and other exudates at the base of the brain has been seen in experimental animals and at autopsy in patients with meningitis who had received steroid therapy. In addition, non-hormonal enzymes and PPD have been used in the past in patients with men-

ingitis in an attempt to prevent the formation of or to lyse adhesions and fibrin at the base of the brain which ultimately lead to mechanical block and hydrocephalus.^{14, 22} This property has been utilized in patients with meningitis when eminent signs of block appear. Clinically, this is evident when the spinal fluid pressure is low or when there is no rise in cerebrospinal fluid pressure with jugular compression in association with a high or rising spinal fluid protein (above 300 mg/100 ml).

However, there is no general agreement concerning the use of adrenal steroids as a therapeutic adjunct in either purulent or tuberculous meningitis. Two controlled studies of the use of steroids in purulent meningitis have demonstrated no benefits in reduction of the incidence of deaths, immediate or long-term neurologic sequelae.^{37, 38} Belsey et al³⁶ demonstrated a lower incidence of sequelae in a group treated with dexamethasone but point out that some of their results may be due to differences in the two groups at the outset. In a controlled study of patients with tuberculous meningitis, Ghosh et al⁵⁰ observed no difference in mortality or the incidence of neurologic sequelae in the steroid treated groups. On the other hand, Smith⁵⁵ states that corticosteroids should always be used when the diagnosis of tuberculous meningitis is reasonably sure. Several authors have reported their experience with adrenal steroids in the treatment of tuberculous meningitis.²³⁻²⁵ Clinical benefits and marked improvement in laboratory values have been observed as early as a few days after starting corticosteroid therapy as manifested by improvement of the sensorium in comatose patients, and a decrease in the spinal fluid protein content and a return to normal values usually within two months. Untoward effects of steroids include activation of pulmonary tuberculosis or other infections and peptic ulcers in an already stressed patient. Meningeal infection, if steroids are administered intrathecally, has also been reported.⁴³ It should be emphasized that steroids are only an adjuvant to specific chemotherapy in tuberculous meningitis. The rebound phenomenon, which other authors have reported after discontinuing steroids in tuberculous infections, was not observed in our patient. The

exact mechanism of the reappearance of neurologic, pulmonary, or other manifestations of tuberculosis after discontinuing steroids is unknown. An incidence of 10% to 20% has been reported in the literature.^{44, 45}

Although corticosteroids have been recommended as adjuncts in the treatment of a variety of acute infections,⁵³ their routine use in patients with acute bacterial meningitis has not proved superior to the administration of antibiotics alone.

SUMMARY

This report describes the findings in two children with tuberculous and influenzal meningitis respectively in whom the use of corticosteroids was considered effective in

preventing and/or treating obstructive hydrocephalus. The literature regarding the use of these agents as adjuncts in the treatment of bacterial meningitis is reviewed.

REFERENCES

References are available from the authors upon request.

ACKNOWLEDGEMENT

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P.O. Box 26901, Oklahoma City, Oklahoma 73190

MEDICAL-LEGAL INSTITUTE

JULY 21st-22nd ARROWHEAD STATE LODGE, LAKE EUFAULA

A two-day medical-legal institute of interest to both physicians and attorneys is being jointly sponsored by the OSMA and the Oklahoma Bar Association. Scheduled for the beautiful Arrowhead State Lodge on Lake Eufaula, the meeting will cover such topics as Professional Corporations, Workmen's Compensation, the Uniform Consumer Credit Code as it Applies to Professionals, Food and Drug Administration Rules and Regulations, Privileged Communications, and an Explanation of the New Medical Examiner's Law in Oklahoma.

A cocktail party is scheduled for Friday evening and a buffet dinner Saturday night.

The meeting has been planned by the joint Medical-Legal Relations Committee of the OSMA and OBA. Registration fee for the two-day meeting is \$40 to cover the cost of course materials, the cocktail party Friday and one ticket to the dinner Saturday evening.

Advanced registration should be directed to the Oklahoma State Medical Association, Attention Ed Kelsay, 601 N. W. Expressway, Oklahoma City, Oklahoma 73118. □

Silver Nitrate Cream Treatment in Burns, Some Interesting and Unanticipated Findings

DAVID WILLIAM FOERSTER, MD

The use of 0.5% silver nitrate cream in hospitalized burns is presented along with unanticipated findings including the conversion of the burn scar eschar into a soft, pliable homograft-like membrane. Reduction of burn mortality to 4% is noted in this article.

THE USE OF 0.5% silver nitrate solution in the treatment of burns is now well established following the pioneering work of Doctor Moyer and associates at Barnes Hospital in the early sixties. The use of a solution, however, had a certain inherent disadvantage as the patient was required to lie continually in large quantities of wet, soggy bandages. In 1968, an article was written by McDonald and Piper concerning the use of a silver nitrate cream for outpatient use. Following this theme, I concocted a new cream utilizing a proven dermatological base, "Velvachol," manufactured by the Texas Pharmaceutical Company, and silver nitrate crystals dissolved to a concentration of 0.5%. This was to be used exclusively on inpatient burn cases. At the present time, my colleagues and I in Oklahoma City have used this cream in 52 hospitalized burn cases, with from ten percent to eighty-five percent body surface involvement. The mortality rate has been 4% to date. The oldest patient treated was eighty-four years of age (who survived a



Fig. 1. Five year old male covered with special burn cream. He was fourteen days post eighty-five percent total body surface burn.

twenty-five percent body surface burn) and the youngest was twenty-two months.

The cream is quite sticky and tenacious; therefore, we now dilute the "Velvachol" to 90% by adding 10% water. It is applied two to three times daily to the burned areas and before each new application the old cream is gently scraped away with tongue



Fig. 2. Closer view of burned child in Fig. 1. Cream has been scraped away in abdomen to reveal eschar.

blades. This has a debriding action as well as a cleansing action. Unlike "Sulfamylon," the cream is quite soothing and does not burn or sting.

An interesting and unanticipated finding concerning the use of this cream was apparent from the first treated patients. In the presence of burn eschars so thick that no underlying epithelialization was possible, the eschar remained soft, pliable and adherent, functioning in the manner of a homograft. This could be stripped away weeks or even months later and the underlying raw area grafted at the optimum time for surgery.

The following case is presented to illus-

David W. Foerster, MD, graduated from the University of Oklahoma College of Medicine in 1958 and has since been certified by the American Board of Plastic and Reconstructive Surgery. He is a member of the American Society of Plastic and Reconstructive Surgeons and the Alpha Omega Alpha.



Fig. 3. Dark area in upper chest is granulating tissue following removal of eschar surgery sixty days post burn. Light grey areas are residual eschar functioning as a homograft.

trate this phenomenon: Fig. 1 shows a five-year-old male burned over eighty-five per-



Fig. 4. Seventy-five days post burn. Membrane-like eschar is being stripped away in preparation for mesh grafting.



Fig. 5. Two years post burn. Axillary contractures have been released and grafted.

cent total body surface by flaming gasoline. He is fourteen days post burn and is covered from head to toe with the special burn cream. Fig. 2 shows a closer view with the cream scraped away over a portion of the abdomen revealing the underlying greyish, soft es-

char. Fig. 3 shows the patient in surgery for the first time, sixty days after the burn. The greyish eschar over most of the body is apparent. A sizable patch has been stripped away in the upper chest area revealing granulating tissue suitable for grafting. This child received only one unit of blood and no antibiotics since the time of his initial injury. He was 40% healed (from eighty-five percent to approximately forty-five percent total body surface involvement) at this time. Mesh grafts were taken from healed burn areas and were used to cover the chest granulations. Fig. 4 is taken at surgery seventy-five days post burn. The soft, pliable, membrane-like eschar is being lifted from the abdomen in preparation for further grafting. At no time was it necessary to use homografts on this patient and he recovered in a satisfactory manner, being discharged after 141 days in the hospital. Fig. 5 shows the patient two years post burn following reconstructive surgery for scar contractures.

SUMMARY

The use of special 0.5% silver nitrate burn cream is discussed. An unanticipated benefit of conversion of the eschar to a soft, pliable homograft-like membrane is noted. □

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Warnings: Use with discretion during the second and third trimesters of pregnancy and restrict to those pregnant patients not cured by topical measures. Flagyl (metronidazole) is secreted in the breast milk of nursing mothers. It is not known whether this can be injurious to the newborn.

Precautions: Mild leukopenia has been reported during Flagyl use; total and differential leukocyte counts are recommended before and after treatment with the drug, especially if a second course is necessary. Avoid alcoholic beverages during Flagyl therapy because abdominal cramps, vomiting and flushing may occur. Discontinue Flagyl promptly if abnormal neurologic signs occur. Exacerbation of moniliasis may occur. In amebic liver abscess, aspirate pus during metronidazole therapy.

Adverse Reactions: Nausea, headache, anorexia, vomiting, diarrhea, epigastric distress, abdominal cramping, consti-

pation, a metallic, sharp and unpleasant taste, furry or sore tongue, glossitis and stomatitis possibly associated with a sudden overgrowth of *Monilia*, exacerbation of vaginal moniliasis, an occasional reversible moderate leukopenia, dizziness, vertigo, incoordination and ataxia, numbness or paresthesia of an extremity, fleeting joint pains, confusion, irritability, depression, insomnia, mild erythematous eruptions, "weakness," urticaria, flushing, dryness of the mouth, vagina or vulva, pruritus, dysuria, cystitis, a sense of pelvic pressure, dyspareunia, fever, polyuria, incontinence, decrease of libido, nasal congestion, proctitis, pyuria and darkened urine have occurred in patients receiving the drug. Patients receiving Flagyl may experience abdominal distress, nausea, vomiting or headache if alcoholic beverages are consumed. The taste of alcoholic beverages may also be modified. Flattening of the T wave may be seen in EKG tracings.

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placed high in the vaginal vault each day for ten days and the oral dosage is reduced to two 250-mg. tablets daily during the ten-day course of treatment. Do not use the vaginal inserts as the sole form of therapy. *In the Male:* Prescribe Flagyl only when trichomonads are demonstrated in the urogenital tract, one 250-mg. tablet two times daily for ten days. Flagyl should be taken by both partners over the same ten-day period when it is prescribed for the male in conjunction with the treatment of his female partner.

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Warnings: Do not use dietary potassium supplements or potassium salts unless hypokalemia develops or dietary potassium intake is markedly impaired. Enteric-coated potassium salts may cause small bowel stenosis with or without ulceration. Hyperkalemia (> 5.4 mEq/L) has been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities. Accordingly, check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently—both can cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe patients on 'Dyazide' regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triamterene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis,

and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Rarely, necrotizing vasculitis, paresthesias, icterus, pancreatitis, and xanthopsia have occurred with thiazides alone.

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In keeping with the public health philosophy of early detection, prevention, and remediation, the State Health Department has developed and helps support fifty-three child and family community guidance centers providing direct mental health services in forty-nine counties. If no direct guidance center services are available in a county, citizens from adjoining areas may be referred to the closest center for assistance.

The centers are usually located in county health department buildings. Appointments or referrals can be made by calling the county health department. Although most referrals are made by school officials or physicians, they are accepted from any source.

Families and/or children and youth with learning, developmental, behavioral, emotional, drug, speech, language, and hearing problems can be referred. Under the direction of county health department medical directors, the multi-disciplinary staff of psychologists, social workers, child development specialists, and speech and hearing



News From The Oklahoma State Department of Health

specialists handle the referrals. Pediatricians and psychiatrists serve as consultants in many centers. Backup neurological services are available through the Child Study Centers in Oklahoma City and Tulsa.

The services provided include diagnostic evaluations; group and individual psychological counseling; speech and hearing services; consultation with school officials, physicians and other community agencies; and community education.

Over 12,000 clients will receive care during fiscal year 1972. Most of these will be youngsters within the age range of five to fourteen. □

COMMUNICABLE DISEASES IN OKLAHOMA FOR MAY, 1972

Disease	May, 1972	May, 1971	April, 1972	Total to Date	
				1972	1971
Amebiasis	2	11	4	14	31
Brucellosis	1	—	2	3	3
Chickenpox	13	31	22	123	152
Encephalitis, infect.	1	—	—	3	8
Gonorrhea	1047	515	797	4150	2808
Hepatitis, infect. & serum	122	62	46	330	298
Leptospirosis	—	1	—	1	1
Malaria	1	7	—	2	48
Meningococcal infections	—	—	3	6	4
Meningitis, aseptic	—	—	1	7	10
Mumps	43	28	11	143	171
Rabies in animals	36	32	79	178	212
Rheumatic fever	6	4	5	19	12
Rocky Mt. spotted fever	4	4	2	7	6
Rubella	16	6	13	31	43
Rubella, congenital syn.	—	—	—	—	—
Rubeola	1	83	6	8	760
Salmonellosis	18	18	18	55	62
Shigellosis	10	7	3	27	35
Syphilis	151	112	67	492	559
Tetanus	—	—	—	—	—
Tuberculosis, new active	32	33	30	124	132
Tularemia	2	1	1	4	3
Typhoid fever	—	2	1	1	2
Whooping cough	—	1	2	7	7

Oklahoma Resolution Rejected by AMA

Oklahoma's resolution regarding Physician-Patient Relationships was rejected by the AMA House of Delegates during its San Francisco meeting. The recommendation that the resolution "not be adopted" came from the reference committee that studied Resolution 92.

In its report the reference committee stated, "Resolution 92 calls on physicians to terminate all relationships between physicians and third parties and to deal only with patients. It also calls for continued development of peer review mechanisms for the protection of both patients and physicians.

"Your reference committee recognizes and sympathizes with the frustration which can result from dealings with some third parties. However, it also feels that a condemnation of all third parties because of such frustrations would place the association in the same position as those who condemn the entire medical profession because of the actions of a few.

"It also recognizes that many physicians do not fully share the opinion voiced in the resolution, and that this association not only upholds the right of physicians to determine their system of reimbursement so long as it exploits neither patient nor physician, but is also supporting legislation to assist in the purchase of health insurance."

Before making its motion that the resolution not be adopted the committee pointed out that there were two existing policy statements adopted by the AMA's House of Delegates in regard to payment for professional services.

The first was adopted at the AMA's Clinical meeting in 1966 and states, "It is proper for third party agencies to make payment of professional medical fees in behalf of patients, with recognition of the fact that the

service of the physician has been to the patient and the liability for payment rests primarily with the patient or his family."

The second statement was adopted two years later at the clinical convention in 1968 and reads, "Resolved, that the House of Delegates of the American Medical Association remind all physicians that as free men and women they have no obligation to accept employment and remuneration under any conditions other than those arrived at by agreement between the physician and the recipient of his services."

The resolution was originally adopted by the OSMA House of Delegates in May with instructions that it was to be forwarded to the AMA. It was necessary to rewrite the resolution so that it could conform to AMA standards. As introduced at the AMA, the resolution read as follows:

"The physicians of this nation, recognizing their duty to support any program that will increase the quality of care and provide more and better care for their patients, have for many years developed, supported and cooperated with prepaid health care programs. As physicians, we now recognize that many of our efforts have in fact resulted in a deterioration of the quality of care for our patients and in regulations and controls making it virtually impossible to continue to protect our patients.

"The beginning of the deterioration in quality of care coincides with the entry of the third party between the physician and his patient and has resulted in the development of controls in which unskilled agents of third parties, in many instances file clerks, have been making medical decisions that in some instances superseded those of the physician and certainly interfere with the phy-

sician's right to make unencumbered decisions.

"The physicians of this nation recognize their duty to resist and oppose any program or programs that will now or in the future result in less or poorer care for their patients, and also those resulting in the loss of historical and traditional doctor-patient relationships. In order to preserve the quality of care that the physicians of this country have developed, certain basic decisions must now be made; therefore be it

"RESOLVED, That the physicians of this nation be encouraged to at once notify their patients that all relationships between physicians and third parties will cease, except in cases of state Medicaid programs of a vendor type, and that a basic contractual agreement exists between the patient and his physician, the physician being responsible to the patient, the patient being responsible to the physician, and that in the patient's best interest no third party will be allowed to come between a patient and his doctor and no direct or indirect relationship between a physician and any third party will be recognized; and be it further

"RESOLVED, That the physicians of this nation, in association with each other, continue to develop peer review mechanisms that will protect the quality of medical care rendered to patients and further protect the physicians from encroachment or intimidation by any third party." □

Paregoric Declared To Be Abused Drug

The Federal Drug Administration has removed the exemption for paregoric from prescription dispensing requirements of the Food, Drug and Cosmetic Act. After June 2nd, paregoric was restricted to prescription sales only. The agency stated that this action was necessary because of the documented abuse potential of the product.

Paregoric is defined as a "camphorated tincture of opium and other products containing more than 100 milligrams of opium per 100 milliliters or per 100 grams." □

AMA Acts on Third Party Interference

The AMA's House of Delegates during its San Francisco meeting adopted a substitute resolution regarding a claims processing procedure utilized in certain group health insurance policies sold by the Aetna Life and Casualty Company. Under these policies, Aetna agrees to pay all or a specified percentage of physician charges up to a level determined to be the "prevailing fee" for the service. The prevailing fee was to be obtained from data in Aetna's file.

A conflict arose when the company began using a new series of form letters to inform patients that their entire physician's fee would not be paid. Three resolutions were offered by various states chastising Aetna for the wording of the letter and for interfering in the physician-patient relationship.

The substitute resolution as adopted by the House of Delegates is as follows:

RESOLVED, That, in contracts where benefits include physician's fees, the AMA make it unequivocally clear that management, labor and third party carriers shall consult with duly constituted representatives of organized medicine before determining "usual, customary and reasonable" fees; and be it further

RESOLVED, That wherever peer review mechanisms exist, it is essential that third parties make use of them as a primary method of resolving differences prior to threats of litigation; and, in turn, that peer review mechanisms be utilized when disputes exist between patient, physicians and third parties referable to the quality of medical care rendered, professional fees or the medical necessity for hospitalization; and correspondingly that the medical profession continue to actively support the development of peer review mechanisms where they do not exist; and be it further

RESOLVED, That the medical profession will not condone or tolerate action on the part of any third party that would encourage or promulgate litigation in the settlement of any

such dispute; and be it further

RESOLVED, That all medical insurance carriers in health plans be informed of this policy; and be it further

RESOLVED, That the Council on Medical Service meet with representatives of Aetna Life and Casualty Insurance Company to satisfactorily resolve the current problem; and be it further

Resolved, That the AMA remind physicians that they have the right to enter into prior agreement with patients regarding the fee for services to be rendered. □

Training Course Set For Hospital ER Nurses

A four-day training course for hospital emergency department nurses will be held in Tulsa September 24th-27th, 1972. The course is being sponsored by the American Academy of Orthopedic Surgeons in cooperation with the Oklahoma Committee on Trauma of the American College of Surgeons.

The course of lectures and audiovisual demonstrations will be sponsored by the Academy's Committee on Injuries at the Camelot Inn and St. Francis Hospital in Tulsa.

Covered will be all phases of medical care rendered in the emergency department to ill and injured persons. Lecturers will discuss in depth the enlarging responsibilities of emergency room nurses. Topics will include Cardiopulmonary Resuscitation, Techniques of Intravenous Fluids and Blood Administration, Drug Abuse, Treatment of the Unconscious Patient, Handling Psychiatric Disturbances, and the Legal and Religious Aspects of Emergency Care.

Chairman of the course is John H. Smith, Jr., MD, of Tulsa. He is a member of the subcommittee on Emergency Room Care of the American Academy of Orthopedic Surgeons and a member of the American College of Surgeons' Committee on Trauma for Oklahoma. He served for two years as co-chairman of St. Francis Hospital's Disaster-Trauma Committee.

For information and registration form, interested persons should con-

tact John H. Smith, Jr., MD, Suite 706, 6465 South Yale Avenue, Tulsa, Oklahoma 74136. □

Physician Delays Cause Financial Problems

Physicians are probably the busiest people in the world. With increasing demands on their time, the family doctor may be tempted to put off doing things which may seem to him of relative unimportance.

One of these seemingly irrelevant items, too often shunted aside by many Oklahoma physicians is the simple, and actually quite important, task of signing death certificates.

State law requires that medical certification will be completed and signed within 24 hours after death by a physician, except when an autopsy is pending. In that case, the words, "autopsy pending" can be written on the certificate and amended after the autopsy is completed.

Often survivors are unable to meet financial obligations until the certificate has been certified by the State Health Department. Bank accounts are tied up, insurance companies cannot settle claims and estates cannot be finalized until this is done.

Signing the form takes only a matter of seconds. The funeral director fills in the personal data, turns the form over to the physician to indicate the cause of death, then, when the physician returns it to him, he sends it to the local registrar. According to statutes, this process is supposed to be completed within 72 hours.

Numerous complaints have been received by health department officials concerning delays in completing certification. Some physicians have held up the process for as long as months.

Forming the habit of taking a few minutes to handle this matter may help to make the event of death a little less burdensome to the family. It will also simplify the jobs of the funeral director, the registrar as well as health department personnel. R. LeRoy Carptenter, MD, State Health Commissioner. □



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331-8331

"Medicare Misconceptions" Pamphlet Under Study

The Illinois State Medical Society in response to numerous requests by its members has published a pamphlet entitled "Medicare Misconceptions." The purpose of the pamphlet is to explain to doctor's patients what Medicare does and does not pay for. Illinois has given all other states permission to reprint the pamphlet for distribution, a possibility which is now being studied by the OSMA Public Relations Committee.

The Public Relations Committee does not have budgeted funds for a printing job of this magnitude and is examining the possibility of printing the brochure and then offering it to physicians on a cost basis for distribution to their patients. The pamphlet is an eight page fold out which will probably cost no more than four cents to five cents each. The more physicians that order them, the cheaper they will be to print with a corresponding drop in purchase price.

The brochure discusses hospital benefits, nursing home care, and the doctor's bill plan. In each case it points out those things that are not covered by Medicare. As an example it states, "To help cover your doctor bills you may also buy supplementary Part B Insurance through the government by paying a monthly premium. Except for the first \$50 a year, Part B pays 80 percent of what Medicare allows for doctors' bills (*not necessarily 80 percent of the doctor's usual fees*). YOU pay the remaining 20 percent. Part B does *not* pay for: ROUTINE PHYSICAL EXAMINATIONS, VACCINE SHOTS (unless directly related to injuries, such as anti-tetanus shots), EXAMINATIONS FOR - OR FITTING OF- EYE GLASSES OR HEARING AIDS, FALSE TEETH or dental expenses (unless dental surgery is required due to accident or disease).

The brochure also points out that Medicare bills once paid without question are now being denied and states, "whether or not *your* bill is

paid is determined by insurance firms under government directive."

The purpose of the brochure is to dispel the misconceptions about Medicare in the minds of many patients. If it is determined that the brochure can be printed economically, all members of the association will be given an opportunity to order copies for distribution to their own patients. ☐

Keiffer Davis Receives Physician's Award For 1971

Kieffer Davis, MD, Chief Medical Director of the Phillips Petroleum Company in Bartlesville, Oklahoma, has been named as the 1971 recipient of the Physician's Award of the President's Committee on Employment of the Handicapped. The award will be presented at the American Medical Association's Congress on Occupational Health in Chicago on September 12th, 1972.

The award is jointly sponsored by the President's Committee on Employment of the Handicapped and the AMA's Council on Occupational Health. The award itself is an il-

lustrated scroll with an appropriate inscription over the signature of the President of the United States.

In order to be eligible for the award a physician must have made "an exceptional contribution to employment of the handicapped." Consideration is given to such things as giving of time, service, facilities, etc., to promote public understanding and employment acceptance of handicapped workers . . . providing leadership to a program leading to employment of the handicapped . . . arranging or sponsoring programs, forms, or expositions . . . availability and outstanding ability as a speaker on the subject of employment of the handicapped.

Nominations may come from members of the Governor's Committee on Employment of the Handicapped, Community Committees, State Medical Associations, or the President's Committee. Any group may recommend, through their governor's committee, as many physicians as they deem advisable so long as they meet the qualifications.

Doctor Davis is the 20th physician to receive the award since its inception in 1952. ☐

Alumni Honor Graduating Class



Phyllis P. Engles, MD, Durant, pins James L. Pool, MD, Tulsa, graduating class president, with a wise old owl guest badge at the Medical Alumni Association's traditional honoring house for OU College of Medicine seniors. With them are Mrs. Pool and alumni president Robert E. Engles, MD, Durant, husband of Doctor Phyllis P. Engles. The commencement eve event for the 103 members of the Class of '72 was held May 27th at Faculty House. ☐

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Proceedings of the 66th Annual Session of the House of Delegates of the Oklahoma State Medical Association

I. CALL TO ORDER:

The House of Delegates convened its 66th Annual Session in the Skirvin Hotel, Oklahoma City, Oklahoma on May 18, 1972. The Speaker, Roger J. Reid, MD, Ardmore, called the meeting to order at 8:30 a.m.

II. INVOCATION:

S. N. Stone, MD, Oklahoma City. Vice-Speaker of the House, delivered the Invocation.

III. REPORT OF THE CREDENTIALS COMMITTEE:

The presence of a quorum was reported by Ann Kent, MD, Muskogee.

IV. ANNOUNCEMENTS:

Doctor Reid announced the appointment of the following committees to assist in the conduct of the meeting:

Credentials Committee

Ann Kent, MD, Muskogee, Chairman
Duane E. Brothers, MD, Tulsa
A. C. Roberson, MD, Anadarko

Sergeants at Arms

Frank Clark, MD, Ardmore, Chairman

Paul Rempel, MD, Enid

Frank C. Lattimore, MD, Kingfisher

TELLERS

John X. Blender, MD, Cherokee, Chairman

Homer D. Hardy, Jr., MD, Tulsa

David C. Ramsay, MD, Ada

Elvin M. Amen, MD, Bartlesville

Reference Committee No. I

Ed L. Calhoon, MD, Beaver, Chairman

William M. Leebron, MD, Elk City

Robert D. Grubb, MD, Tulsa

Port Johnson, MD, Muskogee

Edwin C. Yeary, MD, Ponca City

Leon Combs, MD, Shawnee

Charles H. Price, MD, Miami

Robert R. Hillis, MD, Lawton

B. C. Chatham, MD, Chickasha

Recording Secretary, *Don Blair*

Reference Committee No. II

Harlan Thomas, MD, Tulsa, Chairman

William A. Matthey, MD, Lawton

Alfred T. Baker, MD, Durant

Tom S. Gafford, MD, Muskogee

Robert L. Alexander, Jr., MD, Okmulgee

Kent Braden, MD, Oklahoma City

Floyd F. Miller, MD, Tulsa

Thurman Shuller, MD, McAlester

M. K. Braly, MD, Woodward

Cooper D. Ray, MD, Altus

James V. Miller, MD, Ardmore

Recording Secretary, *David Bickham*

Reference Committee No. III

John A. McIntyre, MD, Enid, Chairman

C. S. Lewis, Jr., MD, Tulsa

Charles Bodine, MD, Oklahoma City

Arnold G. Nelson, MD, Midwest City

Scott Hendren, MD, Oklahoma City

Roger Haglund, MD, Tulsa

David Fried, MD, Hollis

James V. Simmering, MD, Norman

Frank C. Lattimore, MD, Kingfisher

Bill E. Woodruff, MD, Hugo

Recording Secretary, *Ed Kelsay*

Reference Committee No. IV

Francis R. First, MD, Checotah, Chairman

Thomas Rhea, MD, Idabel

Ross Deputy, MD, Clinton

M. E. Robberson, MD, Wynnewood

Francis W. Hollingsworth, MD, El Reno

Paul A. Bischoff, MD, Tulsa

John W. DeVore, MD, Oklahoma City

Richard F. Harper, MD, Pawhuska

Yale E. Parkhurst, MD, Norman

Charles C. Elliott, MD, Okemah

Recording Secretary, *Betty McFarland*

V. INTRODUCTION OF GUESTS:

Mrs. E. Cotter Murray, retiring President of the Woman's Auxiliary to the Oklahoma State Medical Association; Mrs. Port Johnson, Incoming President of the Woman's Auxiliary to the Oklahoma State Medical Association; Mrs. G. Prentiss Lee, Portland, Oregon, President of the Woman's Auxiliary to the American Medical Association; William R. Collins, MD, Muskogee, Candidate for Congress, Second Congressional District were introduced and brought greetings to the House of Delegates.

Doctor Lucien M. Pascucci, OSMA President, introduced Doctor Robert Bird, Dean, University of Oklahoma College of Medicine, and presented him with an AMA-ERF check in the amount of \$12,307.48.

Doctor Bird reported that the money would be put to prompt use to help meet the needs which arise in the school. He also stated that this year's enrollment is the largest increase the medical school has had.

He commended the Medical School Liaison Committee for the help they have given.

John Blaschke, MD, General Chairman, OSMA Annual Meeting Committee, stated that the Committee on Planning suggested that all of the House of Delegates meetings be held on the same day. He stated that the cost of the annual meeting has been approximately \$22,000 for the last five years and that the income of the annual meeting is on the decline.

Doctor Dale Groom, Program Chairman, 1972 OSMA Annual Meeting was introduced by Doctor Roger Reid.

Doctor Reid introduced Kathy Musson and Betty McFarland as the transcribing secretaries.

VI. PRESENTATION OF CERTIFICATE OF APPRECIATION:

Doctor Malcom Phelps was presented with a framed certificate issued in his honor by the 1971 House of Delegates.

VII. REMARKS OF THE SPEAKER:

Doctor Reid expressed his appreciation to the OSMA committees and staff for their work during the past year. He also encouraged all physicians to visit the exhibit areas.

VIII. ANNOUNCEMENTS:

Doctor Reid announced that the 1973 annual meeting will be held in Tulsa's Fairmont-Mayo Hotel and Convention Center, April 26th-27th-28th.

Doctor Reid stated that the House of Delegates Reference Committees would meet immediately following the opening session.

Doctor Reid also encouraged all Delegates to attend the dinner that evening to hear Doctor Max Parrott of Portland, Oregon, Chairman of the Board of Trustees of the American Medical Association.

IX. APPROVAL OF THE MINUTES:

The Speaker asked the pleasure of the House regarding the reading of the minutes of the last annual meeting.

Doctor M. Joe Crosthwait moved that the minutes be approved as published in the Journal of the Oklahoma State Medical Association.

Continued on page 280

Physician-Employers Subject To Occupational Act

Officially known as Public Law 91-596, the Williams-Steiger Occupational Safety and Health Act of 1970 affects any physician who employs one or more workers. Details of the responsibility can be found in a booklet entitled "Handy Reference Guide to the Williams-Steiger Occupational Safety and Health Act of 1970."

Under the act, each employer must display a poster supplied by the Occupational Safety and Health Administration (OSHA). The poster cites provisions of the law, responsibilities of employees and employers, and penalties.

Physicians with two or more employees, must also keep a log of occupational injuries and illnesses (OSHA Form 100), a supplementary record of injuries and illnesses (OSHA Form 101), and a summary of injuries and illnesses (OSHA Form 102). Form 102 must be posted where employees can see it.

The American Medical Association attorneys have said that employers are not required to submit the forms but must have them available for inspection by the Department of Labor. Posters, forms and information may be obtained from OSHA regional offices.

The regional office for Oklahoma can be reached by writing to Department of Labor, OSHA, Room 512, Petroleum Building, 420 South Boulder, Tulsa, Oklahoma 74103. □

Drug Abuse Manual And Film Available

OSMA's Drug Abuse and Alcoholism Committee expects a busy year. Their "Drug Abuse Treatment Manual" produced last year is still in great demand and their training film "What Did You Take?" is being circulated among hospital staffs throughout the state.

During their May meeting the OSMA House of Delegates instructed the Alcoholism and Drug Abuse Com-

mittee to study the updating of the manual for possible republication. A subcommittee has determined that the manual should list all of the drug abuse treatment and counseling services available in the state. The State Mental Health Department, under the direction of Hayden Donahue, MD, has been asked to furnish this material to the OSMA for publication.

In a separate activity, the Alcoholism and Drug Abuse Committee is in the process of compiling a "Drug Abuse Program Directory." The directory will simply be a listing of all of the drug abuse information programs available in the state. It will list those statewide activities such as the program being conducted by the Oklahoma Department of Education and the "Operation Drug Alert" program of the state's Kiwanis Clubs.

The directory will also list individuals who have shown a willingness to present drug abuse programs. There are a number of extremely knowledgeable persons throughout the state talking on the subject. Included among them is Ralph Thompson, an Oklahoma City attorney who was formerly a member of the Oklahoma House of Representatives and for the candidate for the Lt. Governor of the State.

The compilation and publication of such a directory of drug information programs will mark the first time such an endeavor has been undertaken in this state. No single agency has previously attempted to gather all of the information into one publication.

The distribution of a training film specifically designed to teach physicians how to handle drug abuse cases is another operation of the OSMA's Alcoholism and Drug Abuse Committee. Entitled "What Did You Take?," the film has been made available to all medical societies, hospital staffs, and other medical organizations interested in the care and treatment of the drug abusing patient.

The film was prepared in cooperation with the New York Medical Society and was purchased by the OSMA through a donation from the

Hoffman-LaRoche Pharmaceutical Company. The donation came from the company's Roche Laboratory Division, manufacturer of two of the most widely used items in drug overdosed treatment, the tranquilizers Librium and Valium.

The film itself is available from the OSMA office for showing. It instructs physicians in the emergency treatment of overdoses of heroin, barbiturates, amphetamines, and LSD. It is designed for professional audiences only, however it has been shown to a few medically oriented lay audiences in the state.

Anyone wishing to obtain copies of the Drug Abuse Treatment Manual or seeking a showing date for the film should contact Ed Kelsay, Associate Executive Director at the OSMA office in Oklahoma City. □

Polio Sunday To Be September 10th

A recent study of pre-school Oklahoma children indicated that almost one-third of the group did not have adequate polio immunity. To counter this possible threat a massive statewide immunization program is scheduled for Sunday, September 10th.

To be known as "Polio Sunday" the program is being jointly sponsored by the OSMA and the Oklahoma State Health Department. Impetus is added to the program since there have been several outbreaks of polio in the Southern part of the United States and in Mexico.

Kiwanis Clubs from throughout Oklahoma have expressed their willingness to furnish the lay manpower necessary for the immunization stations. In addition, WKY Television has agreed to conduct an intensive public relations campaign.

Every physician and registered nurse in the state will be contacted and asked to voluntarily help man the immunization stations. The OSMA House of Delegates at its annual meeting in May approved the statewide polio campaign and adopted a resolution urging all members to participate. □

Medical Society Conducting PR Program

Members of the Kingfisher County Medical Society are in the process of conducting their own Public Relations Program . . . and meeting with great success. The program started about three months ago when all of the members of the Kingfisher County Society declared, in a published statement in the newspaper, that they would no longer take assignments from third parties. Since that time they have worked closely with the Kingfisher Free Press on a continuing informational program for the area.

The most recent evidence of their program came in the form of a 28 column inch editorial in the Monday, June 26th, issue of the Kingfisher Free Press. Written by Jay Landis Fleming, the newspaper's editor, the editorial was entitled "Who Needs It?" and very succinctly stated the case against government interference in the practice of medicine.

A copy of the editorial was forwarded to OSMA President, Stanley R. McCampbell, MD, by Ray V. McIntrye, MD, of Kingfisher. Doctor McCampbell immediately instructed the OSMA staff to see that the editorial received the widest possible distribution to other Oklahoma newspapers. Permission to distribute the editorial was received from C. S. Hubbard, Publisher of the Kingfisher paper, and it was immediately distributed to over 200 other Oklahoma papers for their consideration.

Mr. Fleming started his editorial by stating, "In the light of government failure in the fields of welfare, housing and agriculture, it is difficult to foresee success of any plan of national health care, with the federal government intervening in such a personal and individual manner as health care. Senator Edward Kennedy and others who are pushing this gigantic scheme say emphatically that there is a health crisis in this country. Your family doctors say there is no such thing."

He went on to say, "The average person knows that inefficiency,

DEATHS

ROBERT L. ALEXANDER, MD
1910-1972

Robert L. Alexander, MD, father of Robert L. Alexander, MD, and Thomas C. Alexander, MD, all three Okmulgee physicians, died May 23rd, 1972. One of five members of a medical family who have practiced in the Okmulgee area, Doctor Alexander was born in Okmulgee and established his practice with his late father there in 1935.

A graduate of the University of Oklahoma College of Medicine, his practice was uninterrupted except for his service in the Army Medical Corps during World War II.

BERT E. THRONE, MD
1920-1972

Bert E. Throne, MD, 51, Tulsa allergist, died May 29th, 1972. A native of Chanute, Kansas, Doctor Throne was graduated from the University of Oklahoma College of Medicine in 1950. A former gynecologist, Doctor Throne established his practice in Tulsa in 1955.

WILLIAM A. MORTON, MD
1908-1972

William A. Morton, MD, a Tulsa physician for the past 35 years, died May 31st, 1972. A native of Richmond, Virginia, Doctor Morton was graduated from Meharry Medical College in 1936. Following his internship in Kansas City, Missouri, he established his practice in Tulsa, specializing in internal medicine. □

wastefulness and incompetence always become a part of any massive government attempt to provide for human needs . . . this has been demonstrated over and over again in many different fields, and it would be no different in the field of providing health care."

After pointing out how Medicare has proved to be prohibitively expensive and a bureaucratic nightmare, and noting that the so-called shortage of doctors did not seem to exist until after Medicare, Mr. Fleming closed his editorial by asking, "Who would pay for an extended system of cradle to the grave national health care? You would, and your employer would. No one has been able to estimate exactly what the cost would be, but, from the experience with Medicare and Medicaid, one can be sure that it will be far more than the estimate. Millions would pay \$1,000.00 or more a year in Social Security taxes alone, before any regular income tax.

"The advocates of national health care base their premise on three things. One is that there is a shortage of doctors, with less than before, and this isn't true. Another is

the rising cost of doctor's fees and this has happened only at the same rate of other costs and of salaries. But the third premise, that government could do the job better and more economically, is something that most people just plain don't believe." □

"Dear Doctor" Letters Sent By AMA-ERF

The American Medical Association's Education and Research Foundation has long been the answer to the criticism that organized medicine does not help the needy or disadvantaged student interested in medical school. In 1971 alone 122 U. S. and Canadian medical schools received grants amounting to \$1,108,247 . . . and that was only part of the picture.

The "Dear Doctor" letter that was sent to all physicians throughout the United States came from John M. Chenault, MD, President of the AMA-ERF. In it Doctor Chenault pointed out that in 1971 the foundation guaranteed 2,415 loans in behalf of medical students, interns and residents for a total of \$3,132,500. Since the inception of the loan guar-

antee program in 1967, 46,064 loans to medical students, interns and residents have been guaranteed amounting to nearly \$52,000,000.

In 1971 nearly 24,000 United States physicians contributed over \$660,000.00 to the program. The AMA Woman's Auxiliary added \$555,000.00, \$301,000.00 came from bequests, private foundations added \$189,000.00, business and industry contributed \$65,000.00, and medical organizations contributed \$61,000.00.

Of the 24,000 physicians, over 1,500 contributed \$100.00 or more.

In his letter Doctor Chenault said, "Once again we are inviting you to participate in AMA-ERF programs —if, in 1972, the American Medical Association Education and Research Foundation is to exceed its 1971 contributions to medical education, expand its loan guaranteed program an opportunity loan guarantee program to disadvantaged, needy students, as well as becoming involved in the variety of other worthwhile programs designed to improve the quality and availability of medical services to all segments of our population."

One new program launched in 1971 was an interest free loan to be made to disadvantaged and needy students during their four years of medical school. Due to limited funds, the program is only operational in California, and will soon be expanded to Illinois and New York, as funds permit. As this fund grows, the program will be expanded further. □

Ada Site of Medical Environment Workshop

Day to day safety problems for hospital and nursing home personnel will be the subject of a one-day workshop on "Safety in the Medical Environment," in Ada, Tuesday, July 18th. Conditions such as tornadoes, floods, fire, bomb threats, and accident prone patients shall be discussed.

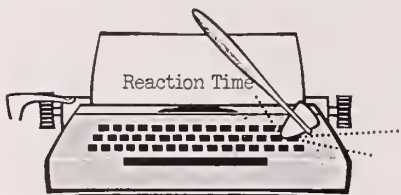
An effective safety program for hospitals and nursing homes is an essential complement to the expertise provided by health care profes-

sionals in giving comprehensive patient care. Sponsoring the workshop jointly to improve hospital safety are the Ada City Fire Department, the Oklahoma State Bureau of Investigation, the Ada Continuing Education Center at Valley View Hospital, the Oklahoma Regional Medical Program, and the United States Air Force School of Health Care Sciences at Sheppard Air Force Base in Texas.

Representatives of these sponsors are conducting three simultaneous sessions centering on hazards encountered with electrical equipment, safety and patient care, and the administrative aspects of fire prevention, bomb threats and natural disasters.

Combining films, lectures and demonstrations, the instructors major purpose in the workshop is to encourage hospital and nursing homes to develop and continually update a comprehensive safety plan. one that utilizes preventive measures and also provides for unplanned emergencies.

Persons wishing to attend the workshop should contact Billy Frank Turner, Ada CEC, Valley View Hospital, 1300 East 6th, Ada 74820, phone 405/332-2323. □



Oklahoma State Medical Assn.
601 N.W. Expressway
Oklahoma City, Okla. 73118
Gentlemen:

Until very recently, it was believed Paraquat poisoning meant sure death to humans.

The enclosed abstract points out that, in at least one instance, this was not true. Since Paraquat use is widespread in Oklahoma, used in particularly large amounts in cotton defoliation, this information might be of interest to many Oklahoma physicians.

Yours very truly,
ROBERT L. McALISTER
Staff Assistant
Pesticides Program

72-0504. Fisher, H. K.; Humphries, M.; Bails, R. (Div. of Respiratory Disease, Harborview Medical Center, 325 Ninth Ave., Seattle, WA 98104). **Paraquat poisoning. Recovery from renal and pulmonary damage.** *Ann. Inter. Med.*, 75(5): 731-736; 1971. (23 references)

A 49-year-old man swallowed approximately 10 ml of Paraquat Dual (the dimethyl sulfate) and developed acute renal failure. Six days after the occurrence he was admitted to the hospital and treated with intravenous fluids and mannitol to increase urine flow, clear the solute, excrete the Paraquat, and, as a result, the serum creatinine fell from 11.6 to 1.2 mg/100 ml. Peritoneal dialysis was not as effective in removing Paraquat as urinary excretion. As a consequence of the poisoning, pleural effusions developed, but pulmonary function tests showed no significant abnormality and by the time of discharge, the effusions had subsided. This patient demonstrated that, in spite of acute renal failure and pulmonary injury, one can recover from Paraquat poisoning. Oxygen therapy should not be utilized until the Paraquat is completely removed from the body, for fear of increased risk of lung injury. □

Abbreviations Save Space But Create Confusion

In this age of instant everything, the urge to abbreviate names is causing a great deal of confusion. In an attempt to keep track of the flood of abbreviations that flow across his desk, one California doctor kept a log of those he noticed in a three-month period.

He found that he must now be able to instantly know and recognize all of the abbreviations, but he was taught none of them in medical school.

During World War II, and there after, abbreviation experts took great delight in seeing if they could abbreviate a multiple word name into one word. This apparently became too much of a challenge, so now they simply throw all of the initials together and you come up

with such interesting things as osha, fehbb, or oasdhi.

Following is a list of about 45 abbreviations that are currently being used, a few that are peculiar to Oklahoma have been thrown in for good measure.

AAMC—Association of American Medical Colleges

AHA—American Heart Association and American Hospital Association

AMPAC—American Medical Political Action Committee

APHA—American Public Health Association

ASHA—American Social Health Association

BHI—Bureau of Health Insurance a Division of SSA

CDC—Center for Disease Control

CHAP—Certified Hospital Admissions Program

CHP—Community Health Planning

CHS—Community Health Service

CMIT—Current Medical Information and Terminology

CPT—Current Procedural Terminology

DBS—Division of Biologic Standards—MIH

DHEW—Department of Health Education and Welfare

DISRS—Oklahoma Department of Institutions, Social and Rehabilitative Services (Formerly Department of Public Welfare)

ECFMG—Education Council for Foreign Medical Graduates

FEHB—Federal Employee's Health Benefits Program

FLEX—Federation Licensing Exam (created by Federation of State Medical Boards, offered in 30 states and acceptable in those states)

FMG—Foreign Medical Graduate

HCC—Health Care Corporation

HEW—Department of Health Education and Welfare

HIBAC—Health Insurance Benefits Advisory Council (advises HEW Secretary)

HMO—Health Maintenance Organization

HRF—Health Related Facility (same as ICF)

HSC—Health Service Corps (provides in these and areas where scarce)

ICF—Intermediate Care Facility (same as HRF)

JCAH—Joint Commission of Accreditation of Hospitals

MHT—Multiphasic Health Testing

NIH—National Institutes of Health

NHI—National Health Insurance

NHSC—National Health Service Corps (HEW)

NCI—National Cancer Institute

OASDHI—Old Age, Survivors, Disability and Health Insurance

OMB—Office of Management and Budget

OMPAC—Oklahoma Medical Political Action Committee

OSHA—Occupational Safety and Health Act

PES—Professional Exam Service (new testing service for competence in health care and health related fields)

PSRO—Professional Standards Review Organization

RMP—Regional Medical Program

RVS—Relative Value Scale

SMA—Sequential Multiple Analysis

SSA—Social Security Administration

UBT—Unincorporated Business Tax

UCR—Usual Customary and Reasonable

UHI—Universal Health Insurance

UR—Utilization Review ☐

Mrs. Forester Installed As AMA Vice-President



MRS. VIRGIL RAY FORESTER

Mrs. Virgil Ray Forester, Oklahoma City, was installed as a Vice-President of the Woman's Auxiliary to the American Medical Association during its 50th Anniversary Convention held in San Francisco, California, June 18th-22nd. In the AMA Auxiliary, Mrs. Forester will have charge of the twelve southern states.

Mrs. Forester is a Past-President of the Oklahoma County Medical Auxiliary, a Past-President and Honorary Member of the Woman's Auxiliary to the Oklahoma State Medical

Association, as well as being a Past-President of the Woman's Auxiliary to the Southern Medical Association.

As county president, Mrs. Forester established the GEMS program, the yearly AMA-ERF Celebration, Medicine and Religion and the Volunteer Friendly Visiting Program. Several seminars in Volunteer Friendly Visiting were presented for the community during this particular year.

She is an honorary member and National Chairman of the Advisory Board of the woman's Auxiliary to the Student American Medical Association and serves as local sponsor to the Association of Interns and Residents Wives. She has been a liaison for the national group and is state liaison for WA-SAMA at present. Mrs. Forester was the 6th Regional Advisor serving in this capacity during WA-SAMA Regional Convention held in Oklahoma City.

Mrs. Forester will begin her tenth year as a member of the Executive Board of the AMA Auxiliary. She served four years as a chairman in the fields of Safety, Home Centered Health Care Services and Philanthropy, four years as a director and one year as historian for the organization.

During the 1972 Annual Meeting of the Oklahoma State Medical Association, Mrs. Forester served a Convention chairman for the woman's auxiliary.

She is the wife of Virgil Ray Forester, MD, a specialist in internal medicine and gastroenterology. ☐

Proceedings —

Continued from page 275

ma State Medical Association. The motion was seconded and it carried.

X. RECESS FOR CAUCUS OF TRUSTEE DISTRICTS:

Doctor Reid announced the House would recess for ten minutes for all Trustee Districts XI, XII, XIII and XIV to caucus.

XI. NOMINATIONS OF OFFICERS:

The House was declared open for the nominations for the position of PRESIDENT-ELECT (One-year term of office).

C. Riley Strong, MD, El Reno, was nominated by Francis W. Hollingsworth, MD, El Reno.

Nominations were declared closed.

Nominations were declared open for the position of VICE-PRESIDENT (1-year term of office).

Robert J. Hogue, Jr., MD, Guthrie, was nominated by M. Joe Crosthwait, MD, Midwest City.

Nominations were declared closed.

Nominations were declared open for the position of SPEAKER OF THE HOUSE OF DELEGATES (2-year term)

Roger J. Reid, MD, Ardmore, was nominated by Frank W. Clark, MD, Ardmore.

Nominations were declared closed.

Nominations were declared open for the position of VICE-SPEAKER OF THE HOUSE OF DELEGATES (2-year term)

S. N. Stone, MD, Oklahoma City, was nominated by Arthur F. Elliott, MD, Oklahoma City.

Nominations were declared closed.

Nominations were declared open for the position of DELEGATE TO THE AMA, POSITION I (2-year term).

Scott Hendren, MD, Oklahoma City, was nominated by Arthur F. Elliott, MD, Oklahoma City.

Nominations were declared closed.

Nominations were declared open for the position of ALTERNATE DELEGATE TO THE AMA, POSITION I (2-year term).

Rex E. Kenyon, MD, Oklahoma City, was nominated by Arthur F. Elliott, MD, Oklahoma City.

Nominations were declared closed.

Nominations were declared open for the position of DELEGATE TO THE AMA, POSITION II (2-year term).

Harlan Thomas, MD, Tulsa, was nominated by Robert M. Shepard, Jr., MD, Tulsa.

Nominations were declared closed.

Nominations were declared open for the position of ALTERNATE DELEGATE TO THE AMA, POSITION II (2-year term).

Orange M. Welborn, MD, Ada, was nominated by Pontotoc County Medical Society.

Nominations were declared closed.

XII. NOMINATIONS OF TRUSTEES AND ALTERNATE TRUSTEES:

Nominations were declared open for TRUSTEE AND ALTERNATE TRUSTEE for the following Trustee Districts (3-year term of office):

DISTRICT XI:

Reporting on the Caucus of representatives from District XI, the following nominations were made:

Thomas E. Rhea, MD, Idabel, was nominated for the position of Trustee and Bill E. Woodruff, MD, Hugo, was nominated for the position of Alternate Trustee.

DISTRICT XII:

Orange M. Welborn, MD, Ada, nominated Frank W. Clark, MD, Ardmore for the position of Trustee and Clarence P. Taylor, MD, Ada, for the position of Alternate Trustee.

DISTRICT XIII:

Paul N. Vann, MD, Lawton, was nominated for the position of Trustee and A. C. Roberson, MD, Anadarko, was nominated for the position of Alternate Trustee.

DISTRICT XIV:

Fred W. Sellers, MD, Mangum, was nominated for the position of Trustee and Lowell N. Templer, MD, Altus, was nominated for the position of Alternate Trustee.

XIII. REPORT OF THE PRESIDENT:

Doctor Lucien M. Pascucci gave his report and it was referred to Reference Committee No. I. (A copy of the report is attached and made a part of the minutes.)

XIV. REPORT OF THE BOARD OF TRUSTEES:

C. Riley Strong, MD, Chairman, Board of Trustees, stated that all relevant information is included in the Board of Trustees Report and the Board's Supplemental Report. Both reports were referred to Reference Committee No. I. (Copies of the reports are attached and made a part of the minutes.)

XV. REPORT OF THE SECRETARY-TREASURER:

Haven W. Mankin, MD, Secretary-

Treasurer, reviewed his report and it was referred to Reference Committee No. I. (A copy of the report is attached and made a part of the minutes.)

XVI. COUNCIL AND COMMITTEE REPORTS:

The Speaker stated that the House of Delegates received the following reports and they are referred to the designated reference committees. (Copies of the reports are attached and made a part of the minutes.)

Committee on Planning, Ed L. Calhoon, MD, Chairman, referred to Reference Committee No. I.

Annual Meeting Committee, John A. Blaschke, MD, Chairman, referred to Reference Committee No. II.

Financial Aid to Education Committee, Ed L. Calhoon, MD, Chairman, referred to Reference Committee No. I.

Medical School Liaison Committee, Harold W. Calhoon, MD, Chairman, referred to Reference Committee No. III.

Constitution and Bylaws Committee, George H. Garrison, MD, Chairman, referred to Reference Committee No. I.

Council on Insurance, C. Alton Brown, MD, Chairman, referred to Reference Committee No. IV.

Council on Professional Education, Robert J. Hogue, Jr., MD, Chairman, referred to Reference Committee No. II.

Council on Professional and Inter-vocational Relations, Orange M. Welborn, MD, Chairman, referred to Reference Committee No. III.

Council on Public Health, Hayden H. Donahue, MD, Chairman, referred to Reference Committee No. IV.

Council on Public Policy, Rex E. Kenyon, MD, Chairman, referred to Reference Committee No. II.

Council on Socio-Economic Activities, B. C. Chatham, MD, Chairman, referred to Reference Committee No. III.

Council on Rural Health, William C. McCurdy, MD, Chairman, referred to Reference Committee No. II.

Resolution No. 13 Committee of 1971, Howard B. Keith, MD, Chairman, referred to Reference Committee No. III.

XVII. INTRODUCTION OF RESOLUTIONS:

The Speaker announced that Resolutions Numbers 1 through 17 would be introduced by "Title and Resolve," referred to the appropriate reference committee and acted upon

in the Closing Session of the House of Delegates:

Resolution No. 1, entitled "Voluntary AMA Membership" was introduced by Custer County Medical Society, and was referred to Reference Committee No. I.

Resolution No. 2, entitled "Voluntary Medical Society Membership" was introduced by Kingfisher County Medical Society, and was referred to Reference Committee No. I.

Resolution No. 3, entitled "Voluntary Medical Society Membership" was introduced by Logan County Medical Society, and was referred to Reference Committee No. I.

Resolution No. 4, entitled "Quality Medical Care" was introduced by Logan County Medical Society, and was referred to Reference Committee No. II.

Resolution No. 5, entitled "Quality Medical Care" was introduced by Kingfisher County Medical Society, and was referred to Reference Committee No. II.

Resolution No. 6, entitled "Limitation of Peer Review" was introduced by Logan County Medical Society, and was referred to Reference Committee No. III.

Resolution No. 7, entitled "Limitation of Peer Review" was introduced by Kingfisher County Medical Society, and was referred to Reference Committee No. III.

Resolution No. 8, entitled "Encouragement of sound patient-physician contract" was introduced by Logan County Medical Society, and was referred to Reference Committee No. III.

Resolution No. 9, entitled, "Encouragement of sound patient-physician contract" was introduced by Kingfisher County Medical Society, and was referred to Reference Committee No. III.

Resolution No. 10, entitled, "Standardization of Student Physical Examination" was introduced by Pittsburg County Medical Society, and was referred to Reference Committee No. IV.

Resolution No. 11, entitled "Financial Support for the Oklahoma Health Science Center" was introduced by the Medical School Liason Committee and the Oklahoma Society of Internal Medicine, and was referred to Reference Committee No. I.

Resolution No. 12, entitled "Direct Billing" was introduced by Robert J. Hogue, Jr., MD, and was re-

ferred to Reference Committee No. III.

Resolution No. 13, entitled "OSMA Position on Abortion" was introduced by the OSMA Legislative Committee and was referred to Reference Committee No. II.

Resolution No. 14, entitled "Physician-Patient Relationship" was introduced by M. Joe Crosthwait, MD, and Arnold G. Nelson, MD, and was referred to Reference Committee No. III.

Resolution No. 15, entitled "Training and Certification in Nuclear Medicine" was introduced by Tulsa County Medical Society, and was referred to Reference Committee No. II.

Resolution No. 16, entitled "The Budgetary Crises at the University of Oklahoma Health Sciences Center" was introduced by the Board of Directors, Oklahoma County Medical Society, and was referred to Reference Committee No. III.

Resolution No. 17, entitled "Physician-Patient Relationship" was introduced by M. Joe Crosthwait, MD, and Arnold G. Nelson, MD, and was referred to Reference Committee No. III.

Reference Committee Meetings:

The Speaker urged all members of the OSMA to attend the Reference Committee Hearings, and announced the following meeting areas in the Skirvin Hotel:

Reference Committee I—Executive Suite

Reference Committee II — Balinese Room

Reference Committee III — Crystal Room

Reference Committee IV—Regency Room

XVIII. NECROLOGY REPORT:

The Vice-Speaker, S. N. Stone, MD, read the Necrology Report. (A copy of the report is attached and made a part of the minutes.)

XIX. ADJOURNMENT OF OPENING SESSION:

The Opening Session of the House of Delegates was adjourned at 10:45 a.m.

Necrology Report

W. Julien Bahr, MD, Oklahoma City
William L. Bonham, MD, Oklahoma City

Alfred H. Bungardt, Sr., MD, Cordell
James T. Colwick, MD, Durant
Thomas B. Coulter, MD, Tulsa
Thomas H. Davis, MD, Tulsa
Robert H. Delafield, MD, Norman

Davy L. Garrett, MD, Tulsa
Robert W. Geyer, Jr., MD, Oklahoma City

Virgil R. Hamble, MD, Enid
Robert H. Johnson, MD, Tulsa
Cecil W. Lemon, MD, Durant
Clyde F. Loy, MD, Oklahoma City
Tracey H. McCarley, MD, McAlester
Donald W. McCauley, MD, Muskogee
Ralph A. McGill, MD, Tulsa
Garland Y. McKinney, MD, Henryetta

James M. McMillan, MD, Vinita
James C. Peden, Sr., MD, Olivette, Missouri

Fred T. Perry, MD, Watonga
Bedford F. Peterson, MD, Vinita
James R. Reed, MD, Oklahoma City
Richard A. Storts, MD, Muskogee
Irene O. Thomas, MD, Tulsa
Roxie A. Weber, MD, Stillwater

CLOSING SESSION

I. CALL TO ORDER:

The Closing Session of the 66th Annual Meeting of the House of Delegates was called to order by the Speaker, Roger J. Reid, MD, at 7:30 p.m., May 18th, 1972, in the Skirvin Hotel, Oklahoma City, Oklahoma.

II. REPORT OF THE CREDENTIALS COMMITTEE:

Ann Kent, MD, Chairman of the Credentials Committee, announced a quorum present.

III. INTRODUCTION OF GUESTS:

Mr. Ralph Guild, President, OU Chapter of the Student AMA, brought greetings to the House of Delegates. He commended the association for the support received.

Doctor Roger Reid introduced Francis Oakes, MD, Oklahoma City Candidate; House Seat 84.

Doctor Reid announced the Tellers: John X. Blender, MD, Cherokee, Chairman

Homer D. Hardy, Jr., MD, Tulsa
Arthur F. Elliott, MD, Oklahoma City

David C. Ramsay, MD, Ada
Elvin M. Amen, MD, Bartlesville

IV. REPORTS OF REFERENCE COMMITTEES:

All reports considered by the House of Delegates are attached and approved and made a part of these minutes.

Report of Reference Committee No. I

Presented by Ed L. Calhoon, MD, Beaver, Chairman.

Mr. Speaker, Members of the House of Delegates, your reference committee gave careful consideration to the items referred to it and makes the following recommendations:

Item I: President's Message:

Your committee recommends approval of this report and on behalf of the entire medical association, the committee extends its sincere appreciation for the splendid representation provided by Doctor Pascucci during his term of office. This is especially important since Doctor Pascucci fulfilled his duties despite serious illness.

Mr. Speaker, I move adoption of this portion of the report. The motion was seconded and it carried.

Item II: Board of Trustees Report:

The reference committee approved the Report of the Board of Trustees and it approves the supplemental report of the Board of Trustees, with the exception that Doctor Neumon D. Johnson, MD, of Tulsa, be removed as a candidate for Life Membership.

With reference to Resolution No. 11, the reference committee endorses this resolution. In addition, testimony was received from Robert M. Shepard, Jr., MD, President of the Tulsa County Medical Society, regarding this resolution and the issue of funding the Oklahoma Health Sciences Center. He also reported on the problem of the state of Oklahoma's capability of financing the University of Oklahoma College of Medicine, a branch school in Tulsa and a separate College of Osteopathy.

The reference committee recommends that the House of Delegates authorize the President to immediately issue a memorandum to the entire membership of the Oklahoma State Medical Association in support of a branch school of the University of Oklahoma School of Medicine as opposed to a college of osteopathy.

Mr. Speaker, I move adoption of this portion of the report. The motion was seconded and it carried.

Item III: Report of the Secretary-Treasurer:

Your committee recommends approval of this report. However, from reviewing this report, the Report of the President, the Report of the Annual Meeting Committee, and other reports recommends that the House of Delegates must contemplate a dues increase in 1973.

Mr. Speaker, I move adoption of this portion of the report. The motion was seconded and it carried.

Item IV: Report of the Planning Committee:

The reference committee recommends that the Report of the Planning Committee be accepted, with the exception that the committee recommends that practicing physicians be selected on a geographic (or statewide) basis as representatives on the medical school admissions committee.

Mr. Speaker, I move adoption of this portion of the report. The motion was seconded and it carried.

Item V: Report of the Constitution and Bylaws Committee:

Your committee recommends the acceptance of this report, pending our recommendation on the next item.

Mr. Speaker, I move adoption of this portion of the report. The motion was seconded and it carried.

Item VI: Resolutions Nos. I, II, and III

The resolutions were combined in the committee discussion because they all related to the question of voluntary AMA dues as opposed to compulsory AMA dues. Much testimony was taken, but the authors of the resolutions were notable by their absence. Some speakers thought strongly that membership in the AMA should be on a voluntary basis, while others pointed out that in this critical era the AMA should be made stronger, not weaker. Regardless of criticism that has been leveled against certain aspects of AMA operations, the fact remains that the AMA represents the best single voice for the medical profession in the nation. Moreover, Oklahoma's three delegates to the AMA wield influence disproportionate to the number of physicians practicing in the state. The passage of these resolutions could cost the OSMA at least one delegate and perhaps two. The majority of the committee feels that such action at this time is unwarranted and unwise. The committee's vote regarding these resolutions was split: four members of the committee voted against the resolutions, one voted in favor of the resolutions and one member abstained. Therefore, your committee recommends that Resolutions I, II and III not be adopted.

Mr. Speaker, I move adoption of this portion of the report. The motion was seconded and it carried.

Item VII: Financial Aid to Education Committee:

Your committee recommends the approval of the report.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and it carried.

Item VIII: Resolution No. 11:

Your Committee also considered Resolution No. 11 and enthusiastically recommends its adoption.

Mr. Speaker, I move adoption of this portion of the report. The motion was seconded and it carried.

Mr. Speaker, I move adoption of this report as a whole. The motion was seconded and it carried.

Report of Reference Committee No. II.

Presented by: Harlan Thomas, MD, Tulsa, Chairman.

Mr. Speaker and Members of the House of Delegates, your reference committee gave careful consideration to the items referred to it and makes the following report:

Item I: Report of the Annual Meeting Committee:

The reference committee would like to commend the Annual Meeting Committee for their tireless efforts in producing the 66th Convention for Oklahoma physicians.

In reference to the questions raised by the committee chairman, your reference committee recommends:

1. That the Oklahoma State Medical Association continue annual meetings in its present format and that the association be prepared to subsidize this meeting if necessary.

2. That the Board of Trustees appoint a committee to work with the Oklahoma City Clinical Society and the Oklahoma Academy of Family Physicians to determine the feasibility of a conjoint meeting.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and it carried.

Item II: Report of the Council on Professional Education:

The committee was impressed with the work of the Council on Professional Education and recommends the approval of this report.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and it carried.

Item III: Report of the Council on Public Policy:

Mr. Speaker, your committee considered this report by section.

Your reference committee is aware of the many influences at the national level affecting the practice of medicine. We are cognizant of the efforts of the council and commend

them for their diligence. We recommend that the report of the council be received for informational purposes.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and it carried.

Section 2: State Legislative Committee

Mr. Speaker, your reference committee would like to congratulate the members of the State Legislative Committee for their tremendous work on the association's behalf at the State capitol. The report contains six recommendations which we considered individually.

Recommendation 1. Your committee recommends a slight editorial change "The Legislative Executive Committee be abolished and the size of the Legislative Committee be reduced to 10 or 12 members who will meet regularly as necessary during the legislative session."

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and it carried.

Recommendation 2. We recommend that recommendation No. 2 be worded as follows, "That the committee be authorized, when appropriate, to invite special guests, county society officials and others, to participate in the deliberations of the committee and when necessary hold meetings outside Oklahoma City where other OSMA members can attend.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and it carried.

Recommendation 3. Your reference committee recommends the adoption of this recommendation as written.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and it carried.

Recommendation 4. Mr. Speaker, your committee deferred action on recommendation No. 4 in order that it might be considered with Resolution No. 13.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and it carried.

Recommendations 5 and 6. Your committee recommends the adoption of these recommendations as written.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and it carried.
Section 3: Public Relations Committee

The reference committee commends the Public Relations Commit-

tee for their work throughout the year and recommends that this report be approved.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and it carried.

Section 4: Medical Heritage Committee

Your reference committee is impressed with the work of the members of this committee in preserving the medical heritage of our state. We would like to draw special emphasis to the committee's recommendations. "... the OSMA House of Delegates urge and encourage all Oklahoma physicians to seek out and preserve, as best they can, the artifacts and manuscripts that best depict the medical history of this state. Members obtaining such material should notify the Medical Heritage Committee of its existence and location."

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and it carried.

Item IV: Report of the Council on Rural Health:

Mr. Speaker, Chairman William C. McCurdy, Jr., MD, and his council members have done an outstanding job in analyzing the problems in providing adequate health care to the citizens of rural Oklahoma. The recommendations in his report are the result of three years of intensive study. Your committee carefully considered these recommendations and would urge that each member of this House of Delegates become familiar with and work toward the implementation of the recommendations.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and it carried.

Item V: Resolutions 4 and 5:

Mr. Speaker, because of the similarity of Resolutions Nos. 4 and 5, they were considered jointly. Your reference committee is aware of the concern of Oklahoma physicians about the expansion of government health programs; we are also aware that there is no verifiable or demonstrated need for many health subsidies, however, the Oklahoma State Medical Association's Board of Trustees and the American Medical Association have supported public support of health education and other programs when it was in the best interest of quality medical care and have requested the Oklahoma Con-

gressional delegation to endorse AMA's Mediredit proposal. The resolve of Resolutions Nos. 4 and 5 would be contrary to previous policies set by this association. We therefore recommend that these resolutions not be adopted.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and it carried.

Item VI: Resolution No. 13 and Recommendation No. 4, Page 8, of the Legislative Committee Report:

Since the subject of the resolution and the recommendation dealt with the OSMA's position on abortion, your reference committee considered these together.

Mr. Speaker, your reference committee recommends that Resolution No. 13 Committee of 1971 not be adopted and that the following recommendations be substituted for recommendation No. 4 of the Legislative Committee Report.

1. That the OSMA Board of Trustees develop a survey form to be submitted to the association's members inquiring of their attitude on abortion; that the survey include a question regarding the specialty practiced by the respondent and his opinion as to whether or not the Oklahoma State Medical Association should take a position on the abortion question.

2. That the results of this survey, when tabulated, be furnished to OSMA members, the legislature, and the public.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and it carried as amended.

Item VII: Resolution 15:

Mr. Speaker, we recommend the adoption of Resolution 15.

Mr. Speaker, I move the adoption of this portion of the report. The motion was seconded and it carried.

Mr. Speaker, I move the adoption of this report as a whole. The motion was seconded and it carried.

Report of Reference Committee No.

III

Presented by John A. McIntyre, MD, Enid, Chairman.

Mr. Speaker, Members of the House of Delegates, your reference committee gave careful consideration to the items referred to it and makes the following recommendations:

Item I: Report of the Council on Socio-Economic Activities:

Your committee recommends approval of this report in its entirety.

Mr. Speaker, I move adoption of this portion of the report. The motion was seconded and it carried.

Item II: Report of the Council on Professional and Intervocational Relations:

Your committee recommends approval of the entire report with the following amendment: On page 14 under Item II strike the following, "in view of the possible creation of a school of osteopathy in the Tulsa area" and then capitalize "It" to make that word the start of the sentence.

Your committee felt that this reference to the osteopathic school was extraneous.

Mr. Speaker, I move adoption of this portion of the report. The motion was seconded and it carried.

Item III: Report of Medical Center Liaison Committee:

Your committee recommends approval of the entire report.

Mr. Speaker, I move adoption of this portion of the report. The motion was seconded and it carried.

Item IV: Report of Resolution No. 13 Committee of 1971:

Your committee recommends approval of this report.

Mr. Speaker, I move adoption of this portion of the report. The motion was seconded and it carried.

Item V: Resolutions No. 6 and 7:

Due to the similarities of these two resolutions, your committee considered them both at the same time, and recommends that they not be adopted.

Mr. Speaker, I move adoption of this portion of the report. The motion was seconded and it carried.

Item VI: Resolutions Nos. 8, 9 and 12:

Your committee considered all three resolutions together and recommends that resolution No. 8 be adopted with the following amendment: The first resolve should be rewritten as follows, "Be it resolved that the Oklahoma State Medical Association reaffirm its previous policy of urging all physicians in Oklahoma to refuse assignments from third party payors and to negotiate direct personal contracts with patients that will properly serve their medical needs." The second resolve should be retained as written.

Mr. Speaker, I move adoption of

this portion of the report. The motion was seconded and it carried.

Item VII: Resolution No. 14:

Your committee feels that this resolution has merit and agrees with the philosophy expressed in it. However, its implementation as written would create enumerable problems.

Therefore, your committee recommends that the resolution be tabled and that its authors be asked to redraft it for future consideration by this House of Delegates.

Mr. Speaker, I move adoption of this portion of the report. The motion was adopted as amended.

Item VIII: Resolution No. 16:

Your committee recommends the adoption of this resolution with its resolves to be amended as follows: "NOW THEREFORE BE IT RESOLVED, that Governor Hall be commended and supported for his declaration of intent to maintain Children's Memorial Hospital Inpatient services and maintain Emergency Room Services at the Health Sciences Center, and

BE IT FURTHER RESOLVED, that the Legislature of the State of Oklahoma and its citizens be encouraged to join the Oklahoma State Medical Association in support of the Health Sciences Center in this crisis in order to maintain the high quality of medical education and medical care that has been carried out in the past."

Mr. Speaker, I move adoption of this portion of the report. The motion was seconded and it carried.

Item IX: Resolution No. 17:

Your committee recommends that this resolution not be adopted.

Mr. Speaker, I move adoption of this portion of the report. The motion was seconded and it carried.

Mr. Speaker, I move adoption of this report as a whole. The motion was seconded and it carried.

Report of Reference Committee No. IV:

Presented by Francis R. First, MD, Checotah, Chairman.

Mr. Speaker, and members of the House of Delegates, your reference committee gave careful consideration to the items referred to it and makes the following report:

Item I: Council on Insurance:

Your committee recommends the approval of this report.

Mr. Speaker, I move adoption of this portion of the report. The motion was seconded and it carried.

Item II: Council on Public Health: Section 1. Council Activities

A. MAST — Military Assistance to Safety and Traffic

Your committee recommends the approval of this report.

Mr. Speaker, I move adoption of this portion of the report. The motion was seconded and it carried.

B. Emergency Medical Services

Your committee recommends approval of this report.

Mr. Speaker, I move adoption of this portion of the report. The motion was seconded and it carried.

C. Venereal Disease Projects

Your committee recommends the approval of this report.

Mr. Speaker, I move adoption of this portion of the report. The motion was seconded and it carried.

D. National Health Service Corps

Your committee recommends the approval of this report.

Mr. Speaker, I move adoption of this portion of the report. The motion was seconded and it carried.

E. Review of Medical Services in Correctional Institutions

Your committee recommends the approval of this report.

Mr. Speaker, I move adoption of this portion of the report. The motion was seconded and it carried.

F. Alcoholism and Intoxication Treatment

Your committee recommends the approval of this report.

Mr. Speaker, I move adoption of this portion of the report. The motion was seconded and it carried.

G. Health Education Curriculum

Your committee recommends the approval of this report.

Mr. Speaker, I move adoption of this portion of the report. The motion was seconded and it carried.

Section II. Committee on Alcoholism and Drug Abuse

Your committee recommends the approval of this report.

Mr. Speaker, I move adoption of this portion of the report. The motion was seconded and it carried.

Section III. Disease Screening

Your committee recommends the approval of this report.

Mr. Speaker, I move adoption of this portion of the report. The motion was seconded and it carried.

Section IV. Immunization Committee

Your committee recommends the approval of this report.

Mr. Speaker, I move adoption of this portion of the report. The mo-

tion was seconded and it carried. Section V. Committee on Laboratory Quality

Your committee recommends the approval of this report.

Mr. Speaker, I move adoption of this portion of the report. The motion was seconded and it carried. Item III. Resolution No. 10

Your committee recommends approval of this resolution.

Mr. Speaker, I move adoption of this portion of the report. The motion was seconded and it carried.

Mr. Speaker, I move adoption of the report as a whole. The motion was seconded and it carried.

Doctor Carpenter asked to make an addition to Item VI, Resolution No. 13 and Recommendation No. 4 of the Legislative Report.

Doctor Carpenter asked to make an addition to Item VI, Resolution No. 13 and Recommendation No. 4 of the Legislative Report.

Doctor Carpenter moved that a question be added to the questionnaire requesting the doctor's opinion on the delivery of contraceptive services to sexually active minors without their parent's consent. The motion was seconded and it carried.

Doctor Robert J. Hogue made a motion that this information should not be made available to the legislature or the public until the association takes a stand. The motion was seconded but it was defeated.

Doctor M. Joe Crosthwait made a motion to amend paragraphs 6 and 8 of Item VII, Resolution No. 14 as follows:

WHEREAS, this has resulted in the development of controls in which unskilled agents of third parties, indeed in many instances, file clerks, making medical decisions for our patients superceding in some instances the decisions of the physician and certainly interfering with the unencumbered decision of the physician, and

NOW THEREFORE BE IT RESOLVED, that the physicians of the state be encouraged at once to notify their patients that all relationships between physicians and third parties will cease except for the State Medical Care Program of the State Welfare Department; that a basic contractual agreement exists between the patient and his physician, the physician being responsible to the patient, the patient being responsible to the physician, and that in the

patients' best interest no third party must be allowed to come between a patient and his doctor and no direct relationship between a physician and any third party will be recognized, and . . .

The motion to accept the amendments to Resolution 14 was seconded and it carried.

V. NEW BUSINESS

There was no new business.

VI. ADJOURNMENT

The 66th annual meeting of the House of Delegates was adjourned at 9:15 p.m.

Recorded by Betty McFarland

Report of the PRESIDENT (APPROVED)

Mr. Speaker, fellow delegates and physicians and guests. A little over one year ago I took office and shortly thereafter became ill and incapacitated for a period of two months. Your headquarters office staff of Don Blair, Dave Bickham and Edward Kelsay conducted our association's affairs in an admirable manner. They have continued to serve above the call of duty in a dedicated and unselfish manner. Mere words cannot express to them my appreciation and heartfelt thanks.

Your approximately thirty committees have been functioning in varying degrees: your Board of Trustees has worked overtime. Their deliberations have enabled our society to keep pace with the times. Time will not permit me to enumerate the activities of all. Some deserve to be mentioned and my apology is directed to those worthy members of other committees who have also been diligent.

As you already heard, your Annual Meeting Committee has developed an exciting format different from previous meetings. Your time will be well spent by attending as many functions as possible. Medicine's problems will be discussed by knowledgeable people in their fields. The OSMa's program speaks for itself.

The Alcoholism and Drug Abuse Committee, following a plea by the President of the United States during the past summer, has conducted a campaign largely responsible for eliminating the amphetamine prescriptions in Oklahoma.

The Planning Committee initiated two foundations, both now incorporat-

ed, one for Community Medical Care and one for Peer Review. The first makes foundation state society funds contributed by you available to needy medical students who agree to serve a rural area as general practitioners with a forgiveness feature attached. To date, several medical students are recipients of these loans. The second is ready to be activated when and if the Bennett Amendment to HR 1 is voted into law. We reluctantly go along with bureaucracy's version (PSRO) of peer review but we hardly have any choice.

Your Medical Center Liaison Committee has been establishing better communications and rapport with the representatives of the medical school, who have demonstrated a desire to cooperate with us in the solution of problems of mutual interest. We as a state association now have an opportunity to them in a serious financial crisis which has recently come to light. We should have more input into the affairs of the medical school.

Your Medical Insurance Review Committee continues to labor hard and long in claims review. Their recommendations have been accepted almost 100%. The members of this committee and many others who volunteer to serve will have an opportunity to do so when expanded peer review becomes a reality.

The Legislative Committee efforts have been almost super-human. Dave Bickham and Doctor Barton Carl deserve special commendation. Of 17 bills enacted into law, 14 were supported, by our committee, 3 opposed. Unfortunately, opposition to two chiropractors' Bills and one osteopathic Bill was unsuccessful. An important lesson has been learned; we need more financial support, more lobbying and more personal effort by every physician in our organization.

Perhaps the one event which has disturbed many of us has been the climax to our feud if it can be so called with the Blue Shield. Last December we withdrew our association's official endorsement of the Blue Shield plan. Recently, Blue Shield offered a UCR contract with a clause giving them the final word in claims review. We objected quite strongly and obtained signatures from more than half of our members to volunteer to serve on our

own foundation for peer review, thus circumventing at least for the present Blue Shield's attempt to do claims review. This has resulted in Blue Shield offering a different UCR contract. At a meeting of representatives from each of our organizations on April 23rd, in an effort to reconcile differences, nothing was accomplished since Blue Shield refused to reconsider the composition of the Blue Shield Board. It is difficult for me to predict at this moment what will happen in the future in this respect.

Gentlemen, your association is financially solvent as you have heard from our treasurer. But there are clouds in the sky. A loss is incurred at each annual meeting of several thousand dollars. This is due principally to the decrease in number of exhibitors from whom much of our income is derived. A better attendance would do much to alleviate this yearly situation. Your state journal will experience a rise of 30 to 40% in production costs due to an unusual situation of seven years standing which just came to light recently. I would add that this has not resulted from any negligence by your association. In addition, there is a real threat by the internal revenue service to tax our advertising income. Inflation rears its ugly head over our association as well. Changes will have to be considered which may involve the format of the journal and of the annual meeting.

It is my distinct pleasure to remind you of the many worthwhile activities of the Woman's Auxiliary. Again, these cannot be listed in this report. We need their support and we can function more efficiently with it than without it.

Having been involved in medicine in an official capacity for the past two years, I have formed opinions, right or wrong, which I would like to pass on to you with your permission. Some type of National Health Legislation will be passed most likely in 1973. The voices of the employers, labor, the minority, the disadvantaged and the retired and those over 65 as well will continue to be heard. If we cannot, as a profession do it alone, then we must participate in the delivery of health care that will be in the best interest of all and not of the type that is being pushed by

Senator Edward Kennedy and labor. This will not necessarily result from an increase in the number of physicians and paramedical personnel. Too many factors, principally socioeconomic, are involved. We must be ready for and accept a change in our traditional physician-patient relationship type of practice, which I hope will never become extinct, for when this happens, the practice of medicine will become just a chore rather than a self-satisfying experience. The development and use of sophisticated electronic systems in our practice already tend to make medicine more of a science and less of an art. The third party payer is a fact of life. At present, it is estimated at 75 to 80% of medical expenses are paid by third parties. This will increase rather than decrease; however, in spite of this, a proper physician-patient relationship can be sustained.

If I am permitted to make any recommendations, I would submit the following:

1. Become involved in politics and public relations. This I realize is contrary to a physician's public image and perhaps might constitute heresy, but I suspect strongly that medicine as it now exists will not prevail unless this happens. Give more consideration to lobbying. Support OMPAC.

2. Strengthen your program for public information. We must present our many good points forcibly and remove some of the tarnish that has resulted.

3. Be prepared to accept a greater financial burden because if the above suggestions are carried through a greater financial sacrifice will be necessary.

In conclusion, may I say that I am grateful that you have allowed me to serve as your president. I have enjoyed this past year and hope that I have been able to contribute in some small measure.

I stand ready, as I am sure all of you are, to assist our incoming president, Stanley McCampbell, whom I assure you will be an aggressive, capable and efficient leader.

Report of the BOARD OF TRUSTEES (APPROVED)

Three meetings of the Board of Trustees have been held since the last annual meeting. This report covers the significant actions of these

meetings. Actions taken at the May 17th meeting will be covered in the accompanying Supplemental Report.

Reportable actions taken at meetings held July 18th, November 14th and December 12th are summarized below:

1. The Board approved an annual audit of the association's accounts for the fiscal year ending May 31, 1971 which revealed an operating surplus of \$13,610. The net worth of the association at the time of audit was \$443,484. Copies of the official audit were distributed to members of the House of Delegates.

2. President Nixon addressed the American Medical Association in Atlantic City in June . . . calling for organized medicine to assume an even more active role in drug abuse legislation to further improve America's health care system, and to contribute as citizens toward strengthening the moral health and character of the nation. The AMA responded immediately by placing a full page ad in some twenty newspapers across the country accepting the challenges of the president. The OSMA delegation to the AMA was impressed with the President's message and with the AMA's timely response, and sought by telephone the permission of the Chairman of the OSMA's Board of Trustees to place the ad in the Daily Oklahoman and the Tulsa World. The Board of Trustees supported this expenditure retroactively.

3. Resolution No. 12 at the 1971 annual meeting of the OSMA called for the annual solicitation of \$10 contributions from the membership to provide a fund to assist needy medical students at OU. The Board of Trustees authorized Doctor David Mock, Associate Dean of Student Affairs, to seek federal matching funds to enlarge the resource available for student aid. The solicitation from the OSMA membership produced \$3,500 which, when matched federally, generated a total fund of \$35,000.

4. The Board approved three resolutions drafted by the Committee on Planning for presentation to the House of Delegates of the American Medical Association at its November meeting in New Orleans. They were entitled: "Equity for Rural Physicians," "Medical School Admissions Policies," and "Insurance Against Mental Illness." All three received favorable treatment by the AMA although slightly amended.

5. The Board approved sponsorship of a two-week air-sea cruise to the Mediterranean leaving Oklahoma City on October 1, 1972. Last year, a tour to Tokyo and Hong Kong managed by the same travel agency INTRAV, received many compliments from OSMA participants.

6. A resolution decrying price discrimination by the federal government against rural physicians was approved by the Board and mailed to rural county medical societies for presentation to local civic clubs, farmers groups, etc. for adoption and distribution to Oklahoma's Congressional Delegation. The resolution pointed out that price differentials against rural physicians were driving small town practitioners to the cities and compromising the ability of small communities to attract new medical manpower; it was further suggested that the exodus of doctors from rural America could be reversed by providing financial incentive for rural practice.

7. The Board approved the work of the Foundation for Peer Review Study Committee in drafting articles of incorporation and bylaws to establish the Oklahoma Foundation for Peer Review, an action supported by the House of Delegates on December 12th. Legislation (the so-called Bennett Amendment) is now pending in Washington which would require a "Professional Standards Review Organization" in each state to review all medical care claims against the government for: (1) Quality of care; (2) Utilization; and (3) Proper choice of medical facility for treatment required. The Bennett Amendment does not permit a medical society *per se* to serve as a PSRO, but it does allow a medical society to establish a foundation for this purpose. Under the terms of the OSMA foundation, the directors of the foundation are elected by the OSMA Board of Trustees.

The OSMA program has not been implemented as yet; however, it stands ready as a vehicle of the OSMA to assume control of the Bennett Amendment when and if it becomes law. Your Board of Trustees feels very strongly that organized medicine, through its own foundation, must retain authority for any review or appraisal of medical services which may be required by law, particularly since it would be possible under the terms of the Bennett

Amendment for a state governmental agency or private non-profit organization to be selected as the statewide PSRO.

8. The Board selected the dates of April 26, 27 and 28 for the 1973 annual meeting to be held at Tulsa's Fairmont-Mayo Hotel and the Tulsa Assembly Center. Regarding the 1974 meeting in Oklahoma City, the OSMA staff prefers to wait and see what develops in the way of new hotel construction.

9. Life Memberships in the OSMA were approved for Ernest Lachman, MD, Oklahoma City, J. B. Eskridge, Jr., MD, Oklahoma City, J. F. Messenbaugh, MD, Oklahoma City, and Leo Lowbeer, MD, Tulsa. (Other recommendations for Life Memberships may be included in the Supplemental Report).

10. Fifty-Year Club pins were awarded to J. B. Eskridge, Jr., MD, Oklahoma City, Clarence E. Williams, MD, Woodward, Emmett O. Martin, MD, Cushing, and Hugh H. Monroe, MD, Pauls Valley.

11. The Board exempted five physicians from the payment of OSMA dues for 1971, based on petitions from county medical societies.

12. The Board drafted a resolution endorsing a new medical school in Tulsa, either as a branch of the University of Oklahoma College of Medicine or as a free-standing institution. This resolution was circulated to the Governor and to legislative leaders.

13. The most vexatious problem confronting the Board of Trustees during the past year involved Blue Shield relations.

On June 13, 1971 the Blue Shield Board amended its bylaws to establish a consumer majority of twelve laymen and nine physicians, thereby abandoning the traditional 50-50 ratio of physicians to consumers. All physician members of the Blue Shield Board voted against this action, but the lay members outvoted them in a solid bloc.

The OSMA Board of Trustees met on July 18th to consider this problem. Physician members of the Blue Shield Board attended the meeting.

Following a lengthy discussion of the problem, during which physician members of the Blue Shield Board testified that Blue Shield management dominated the Board, the OSMA Board of Trustees appointed a committee to meet with

the Blue Shield Board of Trustees for the purpose of negotiating the following conditions:

a. Fifty percent of the Blue Shield Board of Trustees shall be practicing physicians.

b. Fifty percent of the Executive Committee of the Blue Shield Board of Trustees shall be practicing physicians.

c. Both physicians and lay members of the Blue Shield Board of Trustees shall have limited tenure of two consecutive terms.

d. The Blue Shield Board of Trustees shall actively participate in the management of the organization.

e. Any Blue Shield Board member who has resigned shall have the opportunity to become reinstated (to accommodate Doctor Scott Hendren who had resigned in protest to the action taken by Blue Shield on June 13th).

f. OSMA nominations of physicians for appointment to the Blue Shield Board of Trustees shall be honored.

The association's committee, chaired by Joe Crosthwait, MD, met with the Blue Shield Board on July 29th and presented the OSMA Board of Trustees' demands. The committee was then excused and the Blue Shield Board met in executive session. Physician members of the Blue Shield Board reported that they were encouraged that corrective action would be taken by the Blue Shield Board at its next regular meeting on October 31st. In fact, the Blue Shield attorney was instructed to prepare the necessary amendments to the bylaws to restore physician representation.

However, between July 29th and October 31st, lay members of the Blue Shield Board who were sympathetic to the OSMA requests changed their minds, apparently due to the persuasion of Blue Shield management. The net result of the October 31st meeting was that all of the lay members outvoted the physicians to the effect of maintaining the consumer-dominated Board.

The OSMA Board of Trustees met on November 14th regarding this problem and it was decided to take the matter to the House of Delegates at a special called meeting on December 12th.

The Board prepared the following recommendations for the House of Delegates, all of which were adopted by the Delegates:

a. *Communications with Blue Cross and Blue Shield:*

1. Advise Oklahoma Blue Cross and Blue Shield that the association withdraws its endorsement of Blue Shield and will not endorse Blue Cross; further, advise them that the association will no longer have any official representation on either board, but will continue to provide peer review as it does for any insurance company.

2. Advise the National Association of Blue Shield Plans that the association has withdrawn its support from Oklahoma Blue Shield.

b. *Representation on the Blue Cross-Blue Shield Boards of Trustees:*

1. Advise physician members of the Blue Cross and Blue Shield Boards of Trustees that they no longer represent the OSMA in any official capacity, state the reasons why, and thank them for past services. Tell them they may continue to serve as individuals.

c. *Communications with Government:*

1. Advise the Department of Defense (CHAMPUS) that Blue Shield is no longer endorsed by the association.

2. Advise the Civil Service Commission (Federal Employees Program) that Blue Shield is no longer endorsed by the association.

3. Advise the Insurance Commissioner of the State of Oklahoma that the association has withdrawn its endorsement of Blue Shield, and has removed its official representation from the Blue Shield Board of Trustees, and that the Oklahoma State Medical Association is no longer responsible for Blue Shield programs or the organization's operation.

d. *Communications with the Profession:*

1. Advise all members of the OSMA of the fact that the endorsement of Blue Shield has been withdrawn and the reasons why.

e. *Communications with the Press:*

1. Issue a press release.

Following the adoption of the above actions by the House of Delegates, four of the nine physicians of the Blue Shield Board of Trustees resigned (a fifth did not resign since his term was due to expire anyway).

Subsequently, Blue Shield circulated a contract to state physicians seeking their participation in various Blue Shield UCR programs. The con-

tract established Blue Shield as the peer review authority on all questioned claims.

The OSMA President, Doctor Lucien Pascucci, contacted all association members by mail, advising them of the importance of the association maintaining control of the peer review function. OSMA members were furnished a reply card contract where they could give the association exclusive peer review authority. At this writing, about 1,400 state physicians have signed the OSMA contract whereas less than 200 have signed with Blue Shield.

14. The Board of Trustees reports the following breakdown of membership:

Active Members	1,993
Active Dues-Exempt Members	27
Applications Pending	55
Life Members	139
Affiliate Members	8
Junior Members	100

Total	2,322

Recommendation:

a. It is requested that the House of Delegates affirm the actions of the Board of Trustees.

Supplemental Report
BOARD OF TRUSTEES
(APPROVED)

At the annual meeting of the Board of Trustees held at 7:00 p.m. on May 17th, the following actions were taken:

I. Doctor M. Joe Crosthwait was elected as Chairman of the Board of Trustees and Doctor Jerold D. Kethley was elected as Vice-Chairman, both for a term of one year.

II. The Board approved the nominations of the President-Elect, Doctor McCampbell regarding the Executive Committee. Doctor McCampbell nominated the following physicians, by elective office, to serve on the Executive Committee: President-Elect, Vice-President, three Delegates to the AMA, the Speaker of the House of Delegates, the Chairman of the Board, the Secretary-Treasurer and the immediate Past-President.

III. The Board appointed the Board of Directors of the Oklahoma Medical Political Action Committee.

IV. To fill a vacancy on the Oklahoma State Board of Medical Examiners, the Board nominated three physicians, in accordance with state law, one of whom will be appointed by

the Governor to a seven-year term: William A. Matthey, MD, and William C. McCurdy, MD, and Charles L. Tefertiller, MD.

V. The Board received a report from Mark R. Johnson, MD, Editor-in-Chief of *The Journal*.

Doctor Johnson pointed out that *The Journal* has been published without interference since 1906, and through the years it has served as a source of revenue for the overall activities of the association; it has provided Oklahoma physicians with an outlet for sharing their scientific knowledge with their colleagues, and has been a vehicle for educational comment on contemporary problems, issues and achievements. *The Journal* has won two national awards for design and typography.

However, *The Journal* is faced with increasing pressures, a problem which has been reported to the Board and to the House for several years. In addition, the Editorial Board has recently been advised by its printer that additional printing costs will amount to 36% a year. Even though competitive bids have been taken from five additional printers, the fact remains that the position of our printer is equitable. In order to meet this crisis, and to preserve *The Journal* for many good reasons, the Editorial Board has proposed a number of economies which should help financially and has suggested changes in administrative procedures which should improve the efficiency of our publication and its contributing editors. The Board of Trustees agreed with Doctor Johnson that the *Journal of the Oklahoma State Medical Association* should be preserved despite its financial problems, and in view of the changes which he has proposed.

Doctor Johnson received a commendation from the Board of Trustees, and *The Journal* received the support of the Board as an important asset to the future of the OSMA. Moreover, the Trustees suggested that *The Journal* should not only not be discontinued but should be expanded and diversified and improved in the future.

VI. The Board of Trustees reappointed Doctor Robert G. Tompkins, Tulsa, to a term of three years on the Editorial Board.

VII. Doctor Pascucci, Doctor McCampbell and Doctor Strong reported on a meeting held April 23rd

with representatives of the Blue Shield Board of Trustees and its staff. The meeting was called at the suggestion of two physicians, one a former member of the Blue Shield Board and one a current member. The meeting was at the request of Blue Shield. The meeting was totally unproductive.

The Board of Trustees passed a motion to reaffirm the position taken by the House of Delegates at its December 12th meeting and, further, the Board also suggests that the OSMA membership should not sign separate or individual contracts with Oklahoma Blue Shield.

VIII. The Board of Trustees considered the replacement of two members of the Board of Directors for the Oklahoma Foundation for Community Medical Care. The foundation was created by the OSMA to grant loans to students at the OU College of Medicine, up to \$5,000 a year, provided that the students would practice in a needy medical community one year for every year of help received from the foundation. The Board of Directors of the foundation is comprised of ten directors, five physicians and five laymen; one each needed to be replaced on reappointment. The Board voted to add the new OSMA President-Elect to the foundation's Board; and voted to reappoint Mr. William Wise of Idabel to a new term of five years.

IX. The Board considered appointments to the Board of Directors of the Oklahoma Foundation for Peer Review. The Peer Review Foundation was created by the House of Delegates in anticipation of national legislation which would impose a massive peer review program on the nation's physicians and, the foundation would comply with anticipated legislation by making it possible for physicians to govern themselves in the state of Oklahoma.

Since the foundation is anticipatory, it has not been activated, therefore, the Board of Trustees recommended that no changes be made at this time in the foundation's Board.

X. The Board took note that Doctor F. Redding Hood is no longer eligible to serve as chairman of the Volunteer Medical Advisory Committee to the Selective Service due to new rules and regulations recently published. The Board extends sincere appreciation to the dedicated service of Doctor Hood for a period of 25

years in this capacity. In his place, the Board has nominated Thomas H. Henley, MD, of Oklahoma City to serve as Chairman of this important committee.

XI. The Board nominated three candidates for one position on the State Hospital Planning Advisory Council (Hill-Burton). These physicians are A. L. Johnson, MD, El Reno; Arnold G. Nelson, MD, Midwest City; and Ed L. Calhoon, MD, Beaver.

XII. The Board of Trustees approved an initial appropriation of \$1,000 on behalf of the OU Chapter of the Student American Medical Association, subject to further contingencies.

XIII. The Board approved a contribution of \$250 to the Governor's Committee on Employment of the Handicapped. The funds will be used to pay the transportation of the first place essayist to national competition in Washington, D.C.

XIV. The Board approved a contribution of \$200 to the Oklahoma Council on Economic Education.

XV. The Board was requested to contribute \$1,000 to the Library Project of the Oklahoma Regional Medical Program. This proposal was referred to the Council on Professional Education for its investigation and decision.

XVI. The Board approved a contribution of \$200 to the Commission on Reorganization of the State Executive Committee.

XVII. Life Membership applications were approved on behalf of the following individuals: Gifford H. Henry, MD, Tulsa; Neumon D. Johnson, MD, Tulsa; Clarence E. Williams, MD, Woodward; Roy E. Newman, MD, formerly of Shattuck and now of St. Joseph, Missouri (retired); Russell D. Harris, MD, Oklahoma City; Raymond L. Murdoch, MD, Oklahoma City; Lloyd C. Boatright, MD, Oklahoma City; Dewey Matthews, MD, Tonkawa; W. A. Hyde, MD, Durant; Violet Sturgeon, MD, Norman; William H. Atkins, MD, Norman; and Alwin W. Clarkson, MD, Idabel.

XVIII. The Board of Trustees approved David Clemans, MD, Bartlesville, for one-half dues based on petition from his county medical society.

XIX. The Board approved dues exemption based on hardship for five physicians.

XX. The Board approved military

exemption from dues on behalf of Neal A. Pickett, Jr., MD, Tulsa.

XXI. The Board approved an affiliate membership to L. R. Kirby, MD, formerly of Enid and now residing in Anthony, Kansas.

XXII. The Board approved membership in the Fifty Year Club for Maurice J. Searle, MD, Tulsa, W. A. Showman, MD, Tulsa and Dewey Matthews, MD, Tonkawa.

XXIII. After hearing testimony from C. S. Lewis, Jr., MD, Tulsa, the Board voted to endorse Resolution No. 11 to the House of Delegates. The Board also accepted all resolutions submitted after the 30-day deadline for the consideration of the House of Delegates.

XXIV. The Board heard an interesting report from Howard B. Keith, MD, Shattuck, Chairman of the OSMA Medical Insurance Review Committee, concerning his recent trip to Albuquerque, New Mexico. Doctor Keith will express his views on this trip and other matters related to peer review on Friday, May 19th, at 9:30 a.m. to a general meeting for the OSMA membership.

EDITOR'S REPORT:

Board of Trustees

Oklahoma State Medical Association

The Journal of the Oklahoma State Medical Association has been published without interruption since 1906 at the time the medical societies of Oklahoma and Indian territories merged into the State Association as it exists today.

Through the years, The Journal has continued to improve and for a good many of these years, it served as a source of revenue to the overall activities of the association. Moreover, it has provided Oklahoma physicians with an outlet for sharing their scientific knowledge with their colleagues; it has been a vehicle for editorial comment on contemporary problems, issues and achievements; it has been an important means of disseminating organizational news to our members and readers and it provides facilities for ethical, professional notices and announcements. Of considerable importance is the fact that the complete set of bound volumes of The Journal, which is maintained in our State Headquarters, represents the only chronicle of medicine in Oklahoma since statehood.

Obviously there are a number of good reasons to continue to publish

The Journal as long as the Oklahoma State Medical Association exists. Your Editorial Board is proud that The Journal has won two national awards for design and typographical excellence in the past years.

In recent years, however, The Journal has been facing increasing financial pressures. Competition from national publications, a decline in advertising revenues and various other factors have contributed to these pressures. This trend has been reported to the Board of Trustees and House of Delegates on previous occasions.

Recently the Editorial Board was advised that a substantial increase in printing costs will be necessary and competitive bids from other printers lend emphatic verification to this fact. To make matters worse, the Internal Revenue Service is bent on taxing the publications of non-profit corporations, a situation which is being vigorously contested but nevertheless represents a new and potentially crippling financial threat.

Despite these problems, your Editorial Board strongly recommends to the Board of Trustees that publication of The Journal be continued on a monthly basis and that financial problems be dealt with as they arise. The board met on April 16, 1972, and considered the financial problems as well as other matters pertaining to the continuing, monthly publication of a top quality Journal. Recommendations endorsed by the board, OSMA President, OSMA President-elect and OSMA Secretary-Treasurer are as follows;

I. Recommendations pertaining to fiscal affairs:

1. In order to meet the anticipated increase of 36% in the publication costs of The Journal, it is recommended that

(a) commercial and professional advertising rates be raised

(b) physicians be encouraged to insert courtesy as well as professional service announcements in The Journal

(c) a less expensive grade of paper be authorized for the publication of The Journal

(d) addressee labels be utilized in place of mailing envelopes

(e) in future planning we continue to investigate the possibility of joint regional publication of The Journal

with sectional inserts for scientific and organizational copy

(f) we investigate and consider for future recommendations the feasibility of employing an assistant business manager to help manage the fiscal affairs of The Journal, solicit advertising, and otherwise develop recommendations designed to maintain The Journal's solvency.

II. Recommendations pertaining to maintaining and improving the quality and quantity of published material:

1. It is recommended that an expense account be established which would be utilized to reimburse authors and contributors for postal expenses incident to submission of manuscripts and in order to provide stenographic services for the transcription and preparation of solicited copy. Although no definite figure can be proposed until a utilization pattern is established, minimal support is estimated at approximately \$1,500 for the initial year.

2. In order to encourage the submission of manuscripts to our Journal, it is recommended that reprints be provided for authors at our cost and our payment for postage and, if possible, to provide each author, upon his request, a specified number of reprints at no cost to him.

3. In an effort to encourage authorship and promote competence in writing and manuscript development, it is recommended that the Editorial Board develop and participate in a program which will provide training and counselling for authors. The expense of such a program cannot accurately be assessed at this time but would involve a retainer or salary fund in order to make available the services of an expert trained in medical and scientific writing. Such professionals are available and would agree to participate in such a program. It is recommended that a fund of not less than \$500 be authorized for the development and initiation of such a program and that the expenditure of such funds provide information relating to the feasibility and merit of continuing the service.

Respectfully submitted,
Mark R. Johnson, MD
Editor-in-Chief

Report of the
SECRETARY-TREASURER
(APPROVED)

Financial Statement
The association's fiscal year ends

on May 31st, at which time a complete audit of all accounts will be prepared. In order to provide the Delegates with an indication of the financial status of the OSMA the following are reports on ten and one-half months' operations, in our two basic operational accounts, the Membership Account and the Journal Account.

Membership Account

Income:

Membership Dues	\$154,586
Scholarship & Loan Fund (from Dues)	10,505
AMA Commissions	1,549
Interest	4,604
Building Lease Income	3,850
OSMA Newsletter	1,625
Total Income	\$176,719

Expense:

Fixed Expenses	\$111,988
Depreciation	3,497
Councils & Committees	
Public Policy	2,476
Insurance	-
Professional Education	2,321
Socio-Economic	-
Public Health	184

Prof. & Intervocational Relations

	-
Student AMA	-
Scholarship & Loan Fund	10,505
In State Travel	3,186
Out State Travel	11,537
Okla. Health Careers Council	3,150
Mortgage Payments—Building	4,799
OSMA Newsletter	3,308
Total Expense	\$156,951
Surplus	\$19,768

Journal Account

Income:

Journal Ads, Sales, Subscriptions	\$25,899
Subscriptions from dues	3,066
Directory Sales & Ads	1,800
Total Income	\$30,765

Expense:

Journal Expense	\$27,929
Directory Expense	93
Total Expense	\$28,022
Surplus	\$2,743

With the surplus in the Membership Account of \$19,768 added to the surplus in The Journal Account, a net surplus for the ten and one-half months is \$22,511. We had budgeted for a surplus of \$10,466 for this same period.

However, income and expense through May 31st will change the surplus amount somewhat. Income should rise by \$27,484 during the last month and one-half (principally be-

cause of the outstanding dues income) whereas expenses are expected to increase by only \$25,620. Thus the net estimated gain for the fiscal year is \$24,375.

Journal advertising is still on the decline due to cutbacks in advertising expenditures by national drug manufacturers. Hopefully, in the future we should show some increase in national accounts.

Due to the rise in printing cost of the Journal, our printing cost will rise 36% in the coming year. It is not only conceivable but probable that a greater subscription allocation from dues will be necessary to sustain the Journal. See the Board of Trustees Supplemental Report.

The annual meeting has not been included in the above figures. It is traditionally-designed as a break-even project, the Annual Meeting Committee is experiencing declining interest from national drug manufacturers who are phasing out their exhibits at state medical conventions. See the Report of the Annual Meeting Committee. Any loss from this operation, of course, must be deducted from surplus.

1972-1973 Budget

The budget below is only a guide to the financial operations of the OSMA, but it is useful in apportioning income to the various expense categories. The following budget, for the coming fiscal year, is tentatively submitted. Changes may need to be made by the Board of Trustees based on the actions taken during this annual meeting.

Income:

Membership Dues	\$177,000
Scholarship & Loan Fund	9,600
Journal Ads, Subscriptions	32,500
Annual Meeting	17,500
Interest	5,500
AMA Commissions	2,000
Building Lease Income	4,200
Directory	2,500
Total Income	\$250,800

Expense:

Fixed Expenses	\$130,000
Depreciation	4,000
Student AMA	1,000
Councils and Committees	
Public Policy	3,000
Insurance	500
Prof. Education	2,500
Socio-Economic	500
Public Health	1,000
Prof. & Intervocational Relations	500
	8,000

Directory	2,500
OSMA Newsletter	1,500
Scholarship & Loan Fund	9,600
In State Travel	4,000
Out State Travel	14,000
Journal	40,000
Annual Meeting	21,500
Okla. Council for Health Careers	3,600
Mortgage payments	5,484
Total Expense	\$245,184
Surplus	\$5,616

The low estimated surplus for the 1972-73 fiscal year is principally due to increased production costs of the Journal. There is one economy contained in the budget, and another under consideration.

First, the new budget for the Student AMA is only \$1,000 as opposed to the usual budget of \$4,000. For a number of years the association has been conducting a banquet for the SAMA members and their wives. The students have not asked for the banquet for two years, and some physicians question its value. Thus, the new budget eliminates the banquet but reserves \$1,000 to assist the SAMA chapter in sending delegates to their national convention.

Secondly, of the \$2,500 allocation for the Council on Professional Education, \$2,000 is earmarked for educational television (scientific broadcasts are made each Tuesday on educational TV . . . before the stations sign on in the morning and after they sign off at night). There is some question about the number of physicians who view these programs, and the Council on Professional Education will carry out a survey to appraise the continuation of this series.

Recommendation:

1. It is recommended that the proposed budget be approved pending any revisions that the Board of Trustees may find necessary, due to actions taken during this convention or to meet other contingencies.

Report of the
COMMITTEE ON PLANNING
(APPROVED AS AMENDED)

Committee Members

Ed L. Calhoun, MD, Chairman
Stanley R. McCampbell, MD
Roger J. Reid, MD
C. Alton Brown, MD
Rex E. Kenyon, MD
Orange M. Welborn, MD
Lucien M. Pascucci, MD
C. Riley Strong, MD
B. C. Chatham, MD

Hayden Donahue, MD
Robert J. Hogue, Jr., MD

SECTION I
ANNUAL MEETING

As requested by the Board of Trustees, the Committee on Planning met to discuss ways and means to improve the association's annual meeting. Representatives of the Oklahoma City Clinical Society were guests of our group.

In particular, the committee was asked to study the prospect of holding the meeting earlier in the spring and to take the business sessions out of conflict with the educational program.

The 1972 Annual Meeting Committee has fulfilled one of these requests by scheduling the Board of Trustees meeting on the evening of May 17th, and has arranged the House of Delegates meeting in order to permit delegates to attend the educational programming.

Regarding an earlier meeting, the Board of Trustees itself has scheduled the 1973 meeting for April 26-27-28 in Tulsa. As mentioned in the Board of Trustees Report, selection of dates for the 1974 meeting in Oklahoma City is being delayed pending further information about the construction of a new hotel in downtown Oklahoma City.

An interesting discussion with representatives of the Oklahoma City Clinical Society was held on the feasibility of consolidating the two meetings (and perhaps to include the annual meeting of the Oklahoma Academy of Family Medicine).

Clinical Society officials reported that the national Medical Exhibitors Association believes that the demand for technical exhibits far outstrips the ability of drug manufacturers to participate. Therefore, the MEA is recommending that smaller meetings be consolidated in order to permit better programming and greater financial participation by medical exhibitors.

While there was general agreement about the advantages of consolidation, certain problems were also considered.

First, an amalgamation of the OSMA and the Clinical Society, and thereby to hold the meeting in Oklahoma City every year, would undoubtedly meet with disfavor on the part of Tulsa physicians. Moreover, the idea of charging all OSMA members dues to the Clinical Society, or

a substantial registration fee, was felt to be objectionable.

Thus, the matter of consolidation was not resolved, but in the face of declining exhibit revenue, further consideration should be devoted to the subject.

SECTION II

HEALTH IN RURAL OKLAHOMA

The Committee on Planning reviewed the report, "Health in Rural Oklahoma" as prepared by Kelly M. West, MD. Certain recommendations emanated from the discussion:

A. As a preferred method to solve the medical manpower problem, the committee felt that regional health organization systems should be developed on the basis of medical service areas. There should be core facilities and personnel in the center of a medical service area, and this basic health protection service should be extended to the periphery through the use of nurses, medical student preceptors, physicians' assistants, emergency transportation, branch or satellite offices, etc.

B. The medical school admissions policies should be revamped to more accurately determine the kind of medical doctor which will be trained and to select students in ways which will most likely improve the doctor distribution problem; medical students should be removed as voting members of the Admissions Committee. The reference committee recommends that the Report of the Planning Committee be accepted, with the exception that the committee recommends that practicing physicians be selected on a geographic (or statewide) basis as representatives on the medical school admissions committee.

C. Specific plans to enhance socioeconomic conditions in the rural areas should be explored.

Much of the foregoing recommendations, and more, is contained in the Report of the Oklahoma Rural Health Council.

SECTION III

OKLAHOMA RESOLUTIONS.

AMA CLINICAL CONVENTION

Three resolutions for AMA consideration were drafted by the committee, and with the approval of the OSMA, were introduced at the AMA meeting in New Orleans (the resolutions generally received favorable treatment):

A. One resolution was entitled

"Equity for Rural Physicians." The resolution recognized that government health care programs contained discriminating payment practices for the services of rural physicians, and that such policies are driving physicians from rural America at an alarming rate; further, the resolution recommended that this problem be brought to the attention of Congress and that legislation be urged to not only alleviate this problem but to actually provide financial incentives to enhance the number of physicians willing to enter rural practice.

B. Another resolution urged the AMA to work with the Association of American Medical Colleges to develop guidelines for the appropriate ratios of practicing physicians, faculty members and students on medical school admissions committees; further, the resolution urged the AMA to evaluate available motivational tests which would add an objective yardstick for measuring an applicant's overall fitness to become a medical doctor, rather than placing too much emphasis on academic standing.

C. Finally, the committee prepared a resolution urging the AMA not to endorse any health insurance program, either government or private, which does not afford protection against mental illness to the same degree as benefits are provided for ordinary medical and surgical care.

SECTION IV

OTHER ACTIONS

A. The committee recommended to the Board of Trustees that the association officially endorse the AMA Medigredit Bill and to so notify the Oklahoma Congressional Delegation; it was felt that such action would help present a unified stand in Washington and would assist the AMA in its efforts to keep a disastrous plan for national health insurance from being passed.

B. The committee reviewed the articles of incorporation and bylaws of the Oklahoma Foundation for Peer Review, and recommended favorable consideration by the Board of Trustees and House of Delegates.

C. The committee recommended to the OSMA State Legislative Committee that a bill be introduced in the State Legislature which would specifically place "Physicians Assistants" under the control of the State Board of Medical Examiners.

D. The committee took note that

hospitals have had a lien law since 1969, but physicians are excluded and can only attack insurance policies in liability cases by going through the Small Claims Court. It was recommended that the hospital lien law be amended to include physicians.

E. The committee drafted a resolution to recommend a second medical school in Tulsa, whether it be an independent institution or a satellite to a major university. The resolution was passed by the Board of Trustees and submitted to the Oklahoma Legislature and the Governor.

Report of the CONSTITUTION AND BYLAWS COMMITTEE (APPROVED)

Committee Members

George H. Garrison, MD, Oklahoma City, Chairman

E. N. Lubin, MD, Tulsa

Arnold G. Nelson, MD, MWC

Paul H. Rempel, MD, Enid

Clinton Gallaher, MD, Shawnee

Claude E. Lively, MD, McAlester

As provided in the bylaws of the association, your committee has as its purpose the responsibility to consider amendments to the bylaws proposed by members of the association or by component societies. In addition, the committee may originate amendments to the constitution and bylaws, if it so desires. During the past year your committee has not been notified of any proposed changes in the constitution or bylaws of your association.

It has come to our attention that again this year resolutions have been offered to the House of Delegates regarding amending the bylaws of the OSMA to make AMA membership voluntary. As per our report to the 1971 House of Delegates, in the event the House does see fit to take this action the following bylaws changes should be made in order to correctly implement the action:

Amend Chapter I, Section 1.00, of the bylaws by deleting the entire last sentence of that section. All of the wording, with the exception of the section number and title of Chapter II, Section 2.00, should be deleted, and the following wording inserted in its place . . . "Members of this association who elect to become members of the American Medical Association shall pay AMA dues and assessments as levied for their appropriate classification of membership. AMA dues and assessments shall be

collected and remitted by component societies in like manner as state association dues and assessments." Chapter V, Section 7.036 should be amended by inserting the words "... involving AMA members ... " to make the first sentence of that section read, "Judicial decisions of the Board of Trustees *involving AMA members* may be appealed to the Judicial Council of the American Medical Association in accordance with that organization's constitution and bylaws."

Again, as reported last year, in the event that the House of Delegates chooses to make AMA membership voluntary your committee recommends that all county societies be instructed by the House of Delegates to amend their bylaws accordingly.

Resolution No. 1
(DISAPPROVED)

SUBMITTED BY: Custer County Medical Society
TITLE: Voluntary AMA Membership
REFERRED TO: Reference Committee No. I

WHEREAS, membership in the American Medical Association presently is compulsory for members of the Oklahoma State Medical Association; and

WHEREAS, many members of the Oklahoma State Medical Association from Custer County as well as other counties of the state feel that the American Medical Association is not effectively representing the best interests of medicine in such counties and the state nor is it effectively representing the medical community; and

WHEREAS, membership in the American Medical Association on a voluntary basis already is well established as a precedent in more than forty states of the Union; and

WHEREAS, if membership in the American Medical Association were on a voluntary basis then the strength of the Association would be proportional to the degree that it effectively represents the best interests of medicine — in terms of both the people's interest and the interest of the medical community

NOW, THEREFORE, BE IT RESOLVED BY THE CUSTER COUNTY MEDICAL SOCIETY:

That the House of Delegates of the Oklahoma State Medical Association be and hereby is respectfully requested to amend the bylaws of the Oklahoma State Medical Association to

provide that membership in the American Medical Association by members of the Oklahoma State Medical Association shall not be compulsory but, instead shall be on a voluntary or optional basis.

Resolution No. 2
(DISAPPROVED)

SUBMITTED BY: Kingfisher County Medical Society
TITLE: Voluntary Medical Society Membership
REFERRED TO: Reference Committee No. I

WHEREAS, the voluntary association of physicians into medical societies has many worthy goals, but the coercion of physicians into such societies often perverts virtuous objectives, and

WHEREAS, the leadership of societies with compulsory membership often become insensitive to the needs and wishes of the members therefore

BE IT RESOLVED THAT THE Oklahoma State Medical Association amends its Constitution to permit membership in county society and State Association without compulsory membership in the American Medical Association.

Resolution No. 3
(DISAPPROVED)

SUBMITTED BY: Logan County Medical Society
TITLE: Voluntary Medical Society Membership
REFERRED TO: Reference Committee No. I

WHEREAS, the voluntary association of physicians into medical societies has many worthy goals, but the coercion of physicians into such societies often perverts virtuous objectives, and

WHEREAS, the leadership of societies with compulsory membership often become insensitive to the needs and wishes of the members, therefore

BE IT RESOLVED that the Oklahoma State Medical Association amends its Constitution to permit membership in county society and State Association without compulsory membership in the American Medical Association.

Report of the
FINANCIAL AID TO
EDUCATION COMMITTEE
(APPROVED)

Committee Members
Ed L. Calhoon, MD, Beaver, Chairman

Lucien M. Pascucci, MD, Tulsa
Scott Hendren, MD, Oklahoma City
H. E. Denyer, MD, Bartlesville
Stanley R. McCampbell, MD, Oklahoma City

and

THE FOUNDATION FOR
COMMUNITY MEDICAL CARE
Board of Directors

Ed L. Calhoon, MD, Beaver, Chairman
Scott Hendren, MD, Oklahoma City
Hillard E. Denyer, MD, Bartlesville
Lucien M. Pascucci, MD, Tulsa
Stanley R. McCampbell, MD, Oklahoma City
Mr. William Wise, Idabel
Mr. Guy Swadley, Jr., Eufaula
Mr. Lloyd R. Barby, Beaver
Mr. Archibald Edwards, Oklahoma City
Mr. J. M. Rector, III, El Reno

As directed by the House of Delegates last year, your committee has completed the formation of a foundation which has as its primary purpose the financing of medical students who agree to practice in rural areas of the state. In June, the first of these graduates, David Walsh, MD, will begin his practice in Wetumka, Oklahoma.

The foundation's Board of Directors is composed of five physicians (the members of this committee) and five laymen. They are: J. M. Rector, III, El Reno; Guy Swadley, Jr., Eufaula; Lloyd R. Barby, Beaver; William Wise, Idabel and Archibald Edwards, Oklahoma City; these gentlemen have added a special expertise to our meeting and we are confident that the foundation will soon begin to show significant progress in supplying physicians to the needed areas of the state.

Unfortunately, we do not have funds to finance all applicants. We currently have 3 students in school and almost enough money to finance one more. The scholarships are for \$5,000 per year with a forgiveness clause for each year of service in the rural area. For example, a student who receives monies for three years of his education would be obligated for three years of service.

The Foundation funds, to date, have come from money paid by OSMA members into the Loan and Scholarship Fund. Approximately \$10,000 is allocated each year (\$5.00 per dues paying member) in addition the fund has receivables of approximately \$45,000, which we as-

sume will be put into the program as it is repaid.

Several communities in the state have similar programs and others have expressed an interest in financing medical students. The state Legislature has increased appropriations to \$75,000 for its program. Therefore, this fall there will be 18 students in school who have a contractual responsibility to work in areas of Oklahoma that have a physician shortage. The foundation has established dialogue with some of these groups and hopes to be the vortex of these programs.

The names of the recipients of our scholarships and their home towns are:

Max Brazil . . . MS II—Sentinel
John Goff . . . MS III—Muskogee
Randall Rauh . . . MS IV—Alva

We are aware that the activities of the foundation fall far short of solving the medical manpower problems in rural Oklahoma; however, it is a beginning—and with financial support we can make an impact.

The Foundation's Board of Directors has specific plans in several areas to improve its effectiveness. These are:

(1) Develop a list of communities that have a need for physicians and rank them by priority.

(2) Meet with community leaders of priority communities and solicit their support of the foundation.

(3) Develop a brochure about the foundation for distribution to Chambers of Commerce and civic organizations.

(4) Identify communities that have scholarship programs in order that efforts can be coordinated.

(5) Meet with the Board of Trustees of the State's Loan and Scholarship Trust to discuss the selection of students and the placement of recipients.

In order for the foundation to continue its program and become a more viable organization, we encourage the House of Delegates to approve the following recommendations:

(1) OSMA Continue its support by authorizing the Committee to transfer funds to the Foundation.

(2) Permit the committee to notify all OSMA members about the Foundation, its activities, and give

them an opportunity to contribute to its support.

(3) That members of the House of Delegates be encouraged to speak to civic organizations and others to explain the Foundation's activities and encourage financial support.

(Late Resolution)

Resolution No. 11

(APPROVED)

SUBMITTED BY: Medical School Liaison Committee, Oklahoma Society of Internal Medicine

TITLE: Financial Support for the Oklahoma Health Sciences Center
REFERRED TO: Reference Committee No. I

WHEREAS, health is of prime importance to all people, and

WHEREAS, the health of the people of Oklahoma is of major concern to the Oklahoma State Medical Association and to all health agencies in Oklahoma, and

WHEREAS, the health of the people of Oklahoma should be of major concern to all segments of government in their role as agents and servants of the people, and

WHEREAS, the health of the people of Oklahoma is dependent upon an adequate supply of well-trained health professionals, and

WHEREAS, the Oklahoma Health Sciences Center is the major educational resource for the training of health professions in Oklahoma

THEREFORE BE IT RESOLVED that the University of Oklahoma Board of Regents, the Board of Regents for Higher Education, the Honorable Governor David Hall, and the Oklahoma Senate and the Oklahoma House of Representatives, both individually and collectively be urged to guarantee the adequate financial support of the Oklahoma Health Sciences Center in order that the expectations of the people of Oklahoma for the highest quality of health care be thereby assured.

Report of the
ANNUAL MEETING COMMITTEE
(APPROVED)

Committee Members

John A. Blaschke, MD, Oklahoma City, Chairman
Floyd F. Miller, MD, Tulsa
Walter H. Gary, MD, Tulsa
Jesse S. Chandler, MD, Muskogee
James W. McDoniell, MD, Chickasha
Dale Groom, MD, Oklahoma City
Stephen J. Adelson, MD, Tulsa
Paul N. Vann, MD, Lawton

Norman L. Bartlett, MD, Tulsa
Jake Jones, MD, Shawnee
E. C. Yeary, MD, Ponca City
Mrs. Virgil Ray Forester, Oklahoma City

Last year's chairman of the OSMA Annual Meeting, Doctor Floyd Miller called attention to several factors affecting the success of the annual meeting of OSMA:

1) Declining Income

2) Declining Attendance

His analysis of the multiple factors creating these conditions included geography, multiple national specialty meetings and revolutionary transportation technological changes in the past ten years making it quite convenient for Oklahoma Physicians to jet anywhere in America, Europe or South America overnight.

Mindful of these circumstances, the Annual Meeting Committee has worked diligently to devise changes in structure and content of the annual meeting which would be provocative, timely and necessary to our fellow state physicians.

We have placed great emphasis on seminars to provide information on all phases of changing socio-economic factors which alter the nature of medical practice.

Planning has been generally on the premise that the pro's and con's of certain ideological concepts should be presented on pertinent contemporary problems.

From the dialogue of these discussions, each physician could then be informed and make appropriate personal decisions meaningful to his life.

The Committee accepts the thesis of constant change being a style of our civilization and in this framework has scheduled a provocative program attempting to forecast the "Future of Medicine." This has been adopted as the theme of the meeting.

The Committee has assumed that most physicians seek other meetings, including a choice of 2,300 post-graduate courses available in this country, as the primary sources of advancement of their scientific knowledge.

In spite of these efforts however, and a vigorous publicity and promotional campaign, preliminary projections make it likely that once again, the annual meeting expenses will exceed income.

Our State Medical Association can not sustain these losses each year.

This fact plus declining attendance necessitate that Oklahoma physicians make some painful decisions.

(1) Should the annual scientific meeting of the OSMA simply be abolished with a one day meeting of the House of Delegates?

(2) Should the annual scientific meeting simply combine with the state AAGP and/or State Clinical Society?

(3) Is there enough interest in the present type of annual meeting to sustain it by special subsidy?

The structure and function of the annual meeting committee is such that no special recommendation is made by this committee, however a decision should be made on this matter at this meeting. From this decision, instructions can be given to the 1973 Annual Meeting Committee that will clarify the intent and desires of our membership.

ESTIMATED
INCOME AND EXPENSE
66TH ANNUAL MEETING
May 18-20, 1972

Income:

Technical Booth Sales (40 Booths)	\$9,800
Institutional & Scientific Booth Sales	200
Registration Fee	4,000
Ticket Sales	4,250
Contributions	1,400
TOTAL INCOME	\$19,650

Expenses:

General Expense (Printing, Rental, Etc.)	\$17,000
Speaker Expense (Honorariums & Expenses)	5,000
TOTAL EXPENSE	\$22,000
NET LOSS	\$2,350

Report of the
COUNCIL ON PROFESSIONAL
EDUCATION
(APPROVED)

Council Members

Robert J. Hogue, Jr., MD, Guthrie,
Chairman
Irwin H. Brown, MD, Oklahoma City
Forest D. Harris, MD, Lawton
David E. Browning, Jr., MD, Tulsa
Ralph L. Buller, MD, Hydro
James F. Tagge, MD, Enid
James W. Murphree, MD, Ponca City
James D. Loudon, MD, Shawnee
Thomas N. Lynn, MD, Oklahoma City
Y. E. Parkhurst, MD, Norman
James C. Smith, MD, Tulsa
Jack W. Parrish, MD, Seminole
Dale Groom, MD, Oklahoma City
Homer C. Wheeler, MD, McAlester

1. INTRODUCTION

An Oklahoma medical educator made the statement that "Education for the physician is a continuum—beginning when he decides to become a doctor and ending when he retires from practice or dies."

Medical science is the most dynamic, most rapidly changing field known to man. A physician who graduated eight years ago, had he ceased his education, would be practicing obsolete medicine today. This information explosion coupled with an increased concern about the quality of care have created intense pressures on the physician to improve and update his medical education.

A tremendous variety of organizations have erupted to provide educational opportunities for doctors. Specialty societies, Regional Medical Programs, Medical Schools, Voluntary Health Agencies, Organized Medicine at all levels, hospital staff and others offer a proliferation of courses on multiple subjects all over the world. A recent issue of JAMA listed 2,300 different medical education possibilities.

This kind of competition for a few hours of the busy physician's time precludes your Council from being active in producing and conducting many medical education courses. Instead, we have tried to find new opportunities, more innovative ways to keep our members "up to date," and at the same time encourage Oklahoma physicians to avail themselves of sufficient postgraduate education to assure quality medical care.

A. COUNCIL ACTIVITIES

1. Regional Physician Seminars

A program was conducted in Lawton in September last year that was designed to bring the latest information on three different subjects. The topics were — "Evaluation and Management of Low Back Pain"; "Croup and Ear Infections" and "Advances in Preventive Medicine." Medical School Faculty and private practicing physicians taught the course. Facilities of the Comanche County Hospital were used and lunch was served in the cafeteria. The Council charged a registration fee of \$10.00 which included the cost for lunch. Fourteen physician students attended the session.

Another regional course was held in Norman in October. This session was designed to cover various aspects of one subject in depth. The

topics were: "Thyroid Nodules," "Thyroid Carcinoma" and "Diffuse Toxic Goiter." Professors represented Medicine, Surgery and Radiology. Seventeen physician students attended.

Other similar courses were planned for Ponca City, Woodward, and Ada. For various reasons, primarily lack of interest, the Council cancelled these three.

2. Educational Television—"Always on Tuesday"

For several years the Council has cooperated with the Office of Continuing Medical Education for Physicians — O.U. Medical Center, in presenting medical programs via educational television. The one-hour show is televised at 7:00 on Tuesday mornings and 9:30 on Tuesday evenings. These films are of excellent quality and cover a wide range of subjects. A total of 18 hours will be broadcast in 1972. The Council plans to run a limited survey to evaluate the benefits our members receive from the program.

3. Televised Instruction System

Two years ago a closed circuit microwave television system operated by the Board of Higher Regents became operational. The network has sixteen broadcasting and receiving stations in thirteen communities, and features talk-back capability. While the system was designed for the use of industry and higher education, the council feels it has application for medical education. We have discussed with the proper authorities the possibility of presenting a course for physicians. There are various complications but the Council hopes to utilize this resource in the near future.

4. Office of Continuing Education for Physicians

The medical school's office of continuing education co-sponsors the "Always on Tuesday" series and the regional seminars conducted by the Council. We have made arrangements with Irwin Brown, MD, Director of the Office, to assist us in arranging our courses and as a result our courses are accredited by AMA. We hope to continue this relationship. AMA has suggested that we establish our own accrediting procedure—an unnecessary activity so long as we are accredited through the Medical School.

While continuing medical education in general has received considerable

emphasis, financial assistance has been seriously lacking. Doctor Brown does an admirable job with the resources he has available. However, the Council feels medical education, like pre-doctoral and post-doctoral should emanate from the medical education institutions. More time and more money need to be devoted to this activity and we urge increased support for the Office of Continuing Medical Education for Physicians.

5. *Elective Courses at the Medical Center*

The Council feels that some physicians would attend the clinical elective courses offered to senior medical students. We are working with Dean Bird to make such arrangements. Obviously there would be limited space for some of these courses and a tuition would be required. Nonetheless the Council feels this would be of interest to Oklahoma physicians.

6. *Physician-in-Residence Program*

There are other groups and committees working with the medical school on a Physician-in-Residence Program. This approach to medical education would offer medical school professors to teach outside the medical center. The professor would act as a consultant to the local physicians and also learn some of the problems they face. We feel the program has great merit and hope to implement it soon.

7. *Self Assessment Tests*

The Council has reviewed several of the self-assessment tests produced by various specialty societies. These tests provide the physician an excellent opportunity to review his knowledge and should be used.

8. *AMA Recognition Award*

Last year the Council promoted through the OSMA Journal the AMA Physician's Recognition Award. This program is a good guideline for a physician's continuing education program. To receive the award a participant must accumulate 150 credits in three years. There are required and elective credits. Over 200 Oklahoma doctors have received the award and an unknown number participating. We will continue to promote the program.

9. *Educational Requirements for OSMA Membership*

The Council has discussed with the Planning Committee the possibility of

requiring a minimum number of continuing education credits as a requirement for OSMA membership. The association's highest purpose is to promote quality health care and certainly continuing medical education is essential to that goal. However, we feel physicians should be motivated to "keep up" not required to do so.

B. *SUMMARY AND RECOMMENDATIONS*

As can be seen by the report, the Council has been engaged in various activities to provide continuing medical education opportunities for OSMA Members. Many of these are in the development stage and as plans are formulated some will be more advantageous than others. The Council does not have funds to provide an abundance of programs; we would prefer to seek innovative ways to produce medical education and at the same time rely on proven procedures that are attractive to physicians. Several of our recommendations may have to be abandoned because of lack of time and expense.

The Council also thinks it is important that physicians, educators, and the general public realize that medical education comes from many sources — medical journals, tape recordings, consultations, lab. reports, even visits in the coffee shop are proven activities that increase the physicians' knowledge and expertise. It is a mistake to believe that physicians must "sign-in" and "sign-out" to prove they are continuing their education.

Recommendations:

1. That the Council be permitted to continue to produce some Regional Seminars.

2. That the Council be permitted to produce a program utilizing the Televised Instruction System if arrangements can be made and if sufficient interest is shown by OSMA members.

3. That the Council run a limited survey of OSMA members to evaluate the "Always on Tuesday" series and if a sufficient audience is not indicated then be permitted to drop our financial support of the program.

4. OSMA members urge the O.U. Regents and Leaders of the Health Sciences Center to continue and improve support for the Office of Continuing Medical Education for Physicians.

5. That the Council be permitted to work out details with the Medical School that will permit practicing physicians to take clinical elective courses.

6. That OSMA members support the implementation of a Physicians-in-Residence Program.

7. That OSMA members be encouraged to participate in continuing medical education programs that improve the quality of care they render.

Report of the
COUNCIL ON PUBLIC POLICY
(APPROVED AS AMENDED)

Council Members

Rex E. Kenyon, MD, Oklahoma City,
Chairman

C. S. Lewis, MD, Tulsa

F. D. Kalbfleisch, MD, Lawton

Floyd T. Hubbard, MD, Henryetta

Thomas C. Points, MD, Oklahoma City

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Jerold D. Kethley, MD, Shawnee

Weldon K. Haynie, MD, Durant

Mrs. John Williams

Tom S. Gafford, MD, Muskogee

Harlan Thomas, MD, Idabel

James B. Eskridge, III, MD, Oklahoma City

M. H. Newman, MD, Shattuck

Powell E. Fry, MD, Stillwater

H. E. Denyer, MD, Bartlesville

R. Barton Carl, MD, Oklahoma City

John X. Blender, MD, Cherokee

W. H. Porter, MD, Del City

Dave B. Lhevine, MD, Tulsa

State Legislative Committee

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Hayden H. Donahue, MD, Norman

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 Tom Buxton, MD, Oklahoma City

Public Relations Committee

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 Homer D. Hardy, MD, Tulsa
 Jake Jones, Jr., MD, Shawnee
 Duane E. Brothers, MD, Tulsa
 Mrs. Bryce Petrie, Oklahoma City
 M. Joe Crosthwait, MD, Midwest City

James B. Eskridge, III, MD, Oklahoma City

Ralph C. Emmott, MD, Bartlesville
Medical Heritage Committee

George H. Garrison, MD, Oklahoma City, Chairman (& Mrs.)

R. Palmer Howard, MD, Oklahoma City, Vice-Chairman (& Mrs.)

Joe L. Duer, MD, (& Mrs.), Woodward

Clinton Gallaher, MD, (& Mrs.), Shawnee

William R. Paschal, MD (& Mrs.), Oklahoma City

E. C. Mohler, MD (& Mrs.), Ponca City

B. E. Blevins, MD (& Mrs.), Midwest City

C. E. Williams, MD (& Mrs.), Woodward

Winfred A. Showman, MD (& Mrs.), Tulsa

Neil B. Kimerer, MD (& Mrs.), Oklahoma City

Harold J. Black, MD, Tulsa

**SECTION I
 THE COUNCIL**

The Council, during this association year, has continued to survey with apprehension the rapidly changing scene in our Nation's Capitol as those activities relate to our professional activities and to the Public Health. The 92nd Session of Congress, with regard to major legislative proposals affecting us, has been largely one of furor and debate with little definitive action in the form of laws passed.

Our major concern has centered about HR 1, the Social Security Amendments of 1971, which have been subjected to long and detailed hearings in the House Ways and Means and Senate Finance Committees. The Council has been particularly concerned with those sections of HR 1 which relate to the administration of Medicare and with the

Bennett Amendment which would establish professional standards review organizations. The association's views on these particular Sections of HR 1 have been communicated to our Congressional delegation. It would appear, at this writing, that HR 1 will be passed, with little modification, during the 92nd Session of Congress.

A major area of concern has been directed to legislation encouraging health maintenance organizations (HMO's). Great emphasis has been placed on incentives to develop these health care centers in the Administration's health care package. More recently, Senator Kennedy (D, Mass.) has introduced S. 3327 which would amend the Public Health Service Act to provide assistance and encouragement for the establishment and expansion of Health Maintenance Organizations, Health Care Resources, and the establishment of Quality Health Care Commission. This is an extremely far-reaching and disturbing bill to which we will give detailed study and strong opposition.

Numerous proposals for National Health Insurance have been proposed by members of Congress from both sides of the aisle. These bills range from those of relatively minor Federal involvement, i.e. Limited Catastrophic Insurance, to a system of national socialized medicine embraced in the Kennedy-Griffiths Health Security Act. The American Medical Association has presented its own proposal, the so-called Mediredit Bill, calling for tax credit for the purchase of voluntary health insurance, provision of insurance for the poor, and catastrophic coverage. Chairman Wilbur Mills has indicated that there will be no major hearings on the subject of National Health Insurance during this Session of Congress; but it will undoubtedly be a prime issue in the coming Session.

During the past year, the Chairman of this Council has met in committee with Secretary Elliot Richardson of the Department of Health, Education and Welfare and his Staff to discuss HR 1 and the Administration's views on health maintenance organizations. The views of this association and the American Medical Association have been presented, and there has been fair general accord except in the area of HMO's, where the administration appears unswerving in its support.

During this year representatives of the Council and other physicians interested in the socio-economic aspects of medicine have met, at his invitation, with Senator Bellmon to discuss Medicare amendments, health maintenance organizations, National health insurance and rural health problems, along with less pressing matters that relate to our profession. The Senator has solicited our advice, and has been most receptive during these sessions.

In March of this year, twelve representatives of this association attended the AMA/AMPAC Public Affairs Workshop in Washington, D.C., and visited informally with members of the Oklahoma Congressional Delegation as well as with Representatives and Senators from other states.

During the next few months the Council will implement the AMA's program, "Action 72," designed as a public information vehicle to gain support for Mediredit principles. This is a rather ambitious project which will require the cooperation of a great many members of the association. Implementation has been delayed, since as previous statements indicate, there are no anticipated hearings on National Health Insurance in the immediate future. Timing of such a campaign is, of course, of the essence.

The Council would commend the Committee on State Legislation, whose report is attached, for its sincere and dedicated efforts on behalf of this association, for the work and effort it has expended and for its capable representation. The Council would remind the physician members of the association that too frequently we restrict our concern to matters of Federal legislation to the exclusion of legislative activities at the State House. And, as Oklahomans, we are more frequently affected by state legislative proposals than by those of the Federal Government. The Council would endorse the Committee's request for additional staff assistance for state legislative activities if same is financially feasible.

The Council makes no additional recommendations as regards its purpose, composition or function.

**SECTION II
 STATE LEGISLATIVE COMMITTEE**

The 33rd Oklahoma Legislature met for 142 legislative days in 3 sessions (1 special session); 1,541 bills

were considered; 103 bills had medical implications. The association took a position on 59 bills—27 were supported; 22 opposed and we had a no position on 10 bills. Seventeen bills were enacted into law—of these we supported 14; opposed 3.

This report has a summary of those bills the committee feels were the most important and the legislative outcome of each.

There is no way to reduce to writing the activities of this committee and its small executive committee in trying to influence the disposition of these proposed laws. Suffice it to say that we attempted to operate in the best interest of the association's members and the patients they serve. We were criticized frequently, frustrated constantly. We won some and we lost some.

Our members must realize that it is folly to believe that a small group can change the minds of 148 elected politicians. We can't. We need "pre-conditioned" lawmakers — officials who have a sincere concern for the health of Oklahomans. Legislators who know their hometown physicians and know that when our committee or its designee speaks that we represent you and 2,300 other physicians. Most importantly we need 2,300 physicians who have a concern about state Government. We know there are 89—that's how many gave \$10 to OMPAC to finance state races. Political clout comes with political dollars — that's not new. If we want good results, we elect good representatives, that's not new either. But what might be new is that we don't have the political clout. Otherwise good senators and representatives will vote against us if someone else has more political muscle — that's what happened on the chiropractic bills, the osteopathic bills, and the optometry bill. (SB 506)

The executive committee in two lengthy sessions has met to discuss recommendations that should be included in this report. They have been submitted to our parent committee for approval. We earnestly request that they be weighed carefully, added to, deleted from or altered. We need direction from the House of Delegates.

Recommendations:

1. The Legislative Executive Committee be abolished and the size of

the Legislative Committee be reduced to 10 or 12 members who will meet regularly as necessary during the legislative session.

2. That the committee be authorized to invite special guests, county society officials and others, when appropriate, to participate in the deliberations of the committee and that if and when possible hold meetings outside Oklahoma City where other OSMA members can attend.

3. In order for the committee to be more effective at the state capitol, we feel it is important to have a full time man there during the legislative session. With the current OSMA work load and existing personnel this is not possible. We recommend that OSMA Officers and Trustees review personnel requirements with the idea of increasing the size of the staff in order to provide a full-time man at the legislature during session.

4. Our committee for several legislative sessions has taken a "no position" on abortion legislation except when it has been medically unacceptable. There appears to be a changing attitude among physicians and the public about abortions and the committee request that the House of Delegates review its position and direct the committee in the course it is to follow. (See resolution No. 13)

5. That the association re-affirm its desire to continue the "Doctor of the Day" program.

6. When possible hold committee meetings by conference call.

LEGISLATIVE SUMMARY

Note: Copies of bills and Justification of the committee's position are available to all members on request.

I. Most significant bills supported by the committee that became law:

HB 1042 Amended the Good Samaritan Act to provide that under certain conditions emergency care could be rendered wherever required without fear of liability.

HB 1100 Listed drugs with a potential for abuse and restricted their distribution and prescribing. Changed the penalty for offenders and improved law enforcement proceedings.

HB 1101 Established a Drug Treatment and Rehabilitation Authority and a Therapeutic Advisory Council with the power to conduct drug treatment programs, enter into contracts for funds, certify treatment facilities and approve programs.

HB 1401 Amended the Medical Examiner's Act to expand and re-name the Board of Unexplained Deaths to the Board of Medico-Legal Investigation. Clarified types of deaths that are to be reported and provided for appointment of Medical Examiners.

HB 1546 Reclassified certain drugs with a potential for abuse—specifically amphetamines, phenmetrazine, and methylphenidate. *Special Note: Pentazocine (Talwin) had been included and was removed. We have been advised by the Board of Medical Examiners that the abuse of Talwin is becoming more frequent.*

HB 1564 Appropriated \$75,000 to finance students through medical school who will agree to practice in rural areas.

SB 115 Granted minors the right to consent to examination and/or treatment for venereal disease.

SB 339 Permits a physician or a registered nurse to authorize treatment by an intensive care paramedic to a patient in route to the hospital under certain conditions.

SB 453 Enabling legislation authorizing Board of Regents to establish a College of Medicine in Tulsa as a branch of the OU School of Medicine.

SB 506 Establishes a certification program for Physicians Assistant. Authorizes Board of Medical Examiners to approve training programs, issue and revoke certificates.

SB 585 Requires Board of Education to include as a mandatory subject in the Public School System (K through 12) a drug abuse education program.

II. Most significant bills opposed by the committee that became law.

HB 1210 Requires Insurance companies writing health insurance in Oklahoma, include provisions for payment of services rendered by chiropractors.

HB 1625 Made changes in the chiropractic examiners act to provide for approval of national examination, increase licensing and renewal fees and establish a scholarship program for financing chiropractic students.

SB 461 Authorized the establishment of a school of Osteopathy in Tulsa.

III. Most significant bills supported by the committee that were not passed.

HB 1423 Would require insurance companies to adopt a uniform form for reporting health and accident claims.

HB 1463 Would provide for the registration and regulation, under Board of Medical Examiners of Ophthalmic Dispensers. (Opticians)

HB 1500 Would require that all applicants for a license in one of the Healing Arts, take and pass the Basic Science Examination.

HB 1501 Would require that all applicants for a license in the Healing Arts be graduates of a school approved by a recognized accrediting agency.

HB 1224 Would permit an injured employee, covered by workmen's compensation to waive his compensation rights under certain conditions.

HB 1225 Would create a medical panel to aid the Industrial Court in adjudicating claims wherein there is a divergence of medical opinion.

SB 379 Would license and regulate Hearing Aid Dealers.

SB 486 Would adopt a revised Uniform Alcoholism and Intoxication Treatment Act. Alter penalties and permit treatment programs.

SB 495 Would permit ambulance operators and owners to purchase vehicle license tag at a reduced fee.

IV. Most significant bills opposed by the Committee that were not passed.

HB 1169 Would require that every hospital licensed by the state offer 48 hour emergency care to any patient regardless of race, creed, color or ability to pay.

HB 1238 Would replace all members of the State Board of Health and expand its size.

HB 1346 Would have levied a premium tax on all insurance companies based in Oklahoma.

HB 1408 and SB 458 Would liberalize the states laws dealing with abortions. *Special note: These bills were amended in various ways, however, both in original form would have essentially permitted abortion on demand.*

HB 1418 Would have permitted the introduction of various kinds of evidence in civil cases.

HB 1622 Would have prohibited the importation and distribution of amphetamines except under certain conditions.

SB 112 Would change the composition of most state regulatory boards and commissions, to include consumers and establish one omnibus board for over all control.

SB 261 & HB 1331 Would permit employees covered by workmen's

compensation to choose any member of healing art for treatment.

SECTION III

PUBLIC RELATIONS COMMITTEE

During the past year your Public Relations Committee has continued or undertaken several different projects. Activities have been as follows:

1. The association's eight year old weekly health column "A Message From Your Doctor," is distributed to nearly 250 state weekly newspapers each week. Many of these papers use it on a continuing basis, while others will use it only as the subject matter "strikes their fancy." It is used in an average of about 40 newspapers each week. If your association found it necessary to purchase the amount of newspaper space devoted to the health column each year, it would cost approximately \$25,000. The column is produced solely by the OSMA staff.

2. Your committee is continuing its liaison with the OSMA Legislative Committee as regards the "Legislative Doctor of the Day" program. This program is reported in detail in the Legislative Committee's report.

3. During the year, on four different occasions, all 65 radio stations in the state of Oklahoma received a packet of public service announcements on medical subjects. These were produced in the OSMA office.

4. The association fills numerous requests from newspapers for medical information for their own writers. In addition, over 20 special news releases were made during the year, several on the subjects of VD and drug abuse.

5. Two full page newspaper ads were sponsored by the OSMA in response to President Nixon's challenge to the medical profession. These are covered in detail in the Board of Trustees report.

6. Late in the administrative year your committee was asked to work with the Press Association to condense the Hospital-News Media Guidelines down to a more manageable size. They would not supplant the present "Medical News Practices" code that was adopted in 1966 by the OSMA, the Oklahoma Press Association, and the Oklahoma Hospital Association. The condensed guidelines would be printed on the front and back of a 5 x 7 inch card, laminated, and numerous copies furnished to each hospital and newspa-

per in the state. It would be urged that the guidelines be placed underneath the telephones throughout the hospital and that local news reporters keep them handy for reference purposes.

Your Public Relations Committee will continue to work throughout the summer with the other interested organizations to arrive at concise terminology for the condensed guidelines. As soon as they are finalized copies will be transmitted to all physician-members of the OSMA in some appropriate manner.

7. Your association's monthly news letter, OSMA News, has just completed its sixth year of publication. It has been a six page news letter published nine months each year beginning in September and ending the following May. It has been devoted to socioeconomic news of interest to physicians and the members of their household and is mailed directly to the member-physician's home.

The original purpose of the news letter was to be a "fast" method of delivering news to OSMA members between issues of the OSMA Journal. There was to be very little "lag time" between the time information was made available to the Executive office and the time it was printed in the news letter and distributed to all members. Unfortunately, due to the type of printing being used, the news letter could not be produced rapidly.

Since communication with our physician-members is essential if the OSMA is to function properly, your committee has recommended that the OSMA News format be changed to make it (a) more readable, (b) faster to print, (c) and available to the OSMA staff in the event it becomes necessary to print fast "special editions."

The new format will be announced in the OSMA Journal so that our members will be watching for it when it first comes out next September.

SECTION IV

MEDICAL HERITAGE COMMITTEE

As was announced at the last year's House of Delegates meeting in Tulsa, your Medical Heritage Committee has begun the actual collection of medical paraphernalia for the purpose of displaying it in such a way as to depict medical history in Oklahoma. A number of physicians from throughout the state, and na-

tion, have contributed to the committee.

During the past year a large glass display case was purchased and placed in the lobby of the association headquarters building in Oklahoma City. Although it is somewhat disorganized at the present time, a large number of early day medical instruments, textbooks, and other medical history artifacts, are being displayed. It is envisioned that this display will be changed periodically so that new "old" artifacts may be shown.

A number of items are now in storage in the OSMA Executive Office Building, items that have been collected during the past two years. This storage space was made available to the committee by the OSMA Board of Trustees sometime ago.

Since we now have storage space, and some display space, your committee would like to urge all members of the association to seek out and preserve, as best they can, the artifacts and manuscripts that best depict the medical history of this state.

In attempting to preserve the medical heritage of Oklahoma, we should always bear in mind that more is involved than just medical instruments and information on physicians. Our history is replete with stories about the activities of nurses, midwives, and even "horse doctors" being the only source of medical help and responding with compassion and professionalism. These stories and the physical evidence to support them, should not be allowed to perish since they are an integral part of our heritage.

We should also seek to preserve information, artifacts, and paraphernalia involved in the early training of nurses and other medical personnel and involving early hospitals and clinics.

Your committee was recently asked to honor a man who has done much to portray the early pioneer doctor. On April 22nd at the National Cowboy Hall of Fame and Western Heritage Center your committee chairman presented Mr. Milburn Stone with a token of appreciation from Oklahoma doctors. Mr. Stone is, of course, "Doc Adams" on the television series "Gunsmoke."

In making the presentation to

"Doc," your committee chairman said, "In your practice, you have admirably depicted the life, the difficulties, the frustrations, the human side, the courage and resourcefulness of the pioneer physician."

Your committee pledges to continue its efforts to preserve Oklahoma's medical heritage. But, we need the help of every physician in the state.

Recommendations:

1. It is recommended that the OSMA House of Delegates urge and encourage all Oklahoma physicians to seek out and preserve, as best they can, the artifacts and manuscripts that best depict the medical history of this state. Members obtaining such material should notify the Medical Heritage Committee of its existence and location.

Report of the COUNCIL ON RURAL HEALTH (APPROVED)

C. Riley Strong, MD, Chairman
Board of Trustees
Oklahoma State Medical Association

Dear Doctor Strong:

Three years ago the Board of Trustees appointed me Chairman of a special council to study and make recommendations for solutions to the health manpower shortages in rural Oklahoma.

With this letter we transmit to the Board our recommendations — the result of intense deliberations.

Dr. Strong, this report is based upon findings of a survey done for us by Kelly West, MD, and from comments presented to the Council by its members. It is far reaching and will require major commitments before its recommendations can be implemented. We encourage the Board and the House of Delegates to offer their critical comments, their helpful suggestions — and most importantly, we need their support.

Personally, I would like to thank you for appointing such a dedicated group. They have honored their charge — to find ways to improve the quantity and quality of Rural Health Services.

Sincerely,
William C. McCurdy, Jr., MD
Chairman

Council on Rural Health

WCM:km

Enclosure

Council Members

William C. McCurdy, MD, Purcell,
Chairman

Senator Ernest Martin, Ardmore
Rep. Visanio Johnson, Oklahoma City
Jack Boyd, Oklahoma City
Cleveland Rodgers, Tulsa
Edgar W. Young, Jr., MD, El Reno
R. Leroy Carpenter, MD, Oklahoma City

Joe L. Duer, MD, Woodward
Thomas Rhea, MD, Idabel
Jack D. Fetzer, MD, Woodward
Ernest G. Shadid, MD, Norman
Homer D. Hardy, Jr., MD, Tulsa
Lloyd G. Williams, MD, Wetumka
Rep. Wiley Sparkman, Grove
Dale Groom, MD, Oklahoma City
Phillip Smith, ScD, Oklahoma City
Roger J. Lienke, MD, Oklahoma City
Leonard P. Eliel, MD, Oklahoma City
Robert J. Hogue, MD, Guthrie
Ken McFall, Oklahoma City
Ben Blackstock, Oklahoma City
Charles L. Tefertiller, MD, Altus
Norman A. Cotner, MD, Grove
Bill E. Woodruff, MD, Hugo
Noel E. Miller, MD, Okemah
Harold Stout, MD, Waurika
Mrs. Ed Calhoon, Beaver

I. ORGANIZATION OF THE COUNCIL

The name of the Council should be changed to the "Council on Rural Health, Inc.," organized as a non-profit corporation with a board of directors.

Since the Council was appointed by the Medical Association, it is essentially an association function. The problems the Council faces are multi-faceted and require a certain independence. In addition, the council needs funds to carry out its function. The corporate structure will permit the filing of applications for monies from various sources.

The Board of Directors should represent the many factions that can have an influence on rural health problems. A majority of its members should be selected from the health professions, however substantial input will be necessary from the public sector, and at least one-third should represent the lay public. The composition of the Board should include specific representation from the medical profession, the osteopathic profession, the nursing profession and various state agencies and institutions.

The board should have a small executive committee with authority to act on the board's behalf.

The most critical health manpower shortage is physicians. Therefore, the Executive Committee should include

a majority of rural physicians.

The existing council should appoint the original board of directors and assist in the organization of the corporation, as well as secure initial funding.

The Council will need assistance in organizing its corporate structure, applying for funds, setting initial priorities, making arrangements for quarters, and locating staff. The representation of the Council provides sufficient expertise in these areas and with small grants from each, they can be incorporated and organized.

The Council's first priority should be the development and adoption of models for the recruitment, deployment and distribution of physicians in non-metropolitan rural Oklahoma.

There exists today literally tons of material about the shortages of health manpower. Most of these reports have credibility but most are based upon ratios that have no medical significance. The council needs to know how many physicians of what specialty, rural Oklahoma needs and where they should be located. The same information should be gathered on other health personnel.

II. RECRUITMENT

The Council should initiate an active recruitment program encouraging out-of-state physicians to come to Oklahoma.

O.U. Medical School statistics indicate that approximately 48% of its graduates are practicing outside the state. Many of these were born and raised in Oklahoma. A well done campaign advising these physicians of the practice opportunities in Oklahoma might be fruitful in enticing some to return. In addition, there are graduates of foreign schools that have received quality education. Canadians, and some European physicians should have appropriate access to State Licensure. However, the Council should urge caution and discriminate recruitment of other foreign graduates.

Oklahoma needs an adequately funded health manpower placement service.

Physicians and health personnel interested in coming to and staying in Oklahoma should be able to receive information about practice opportunities from a central source. Representatives of the Health Sciences Center have plans for such a service and they need encouragement, funds and the help of health

agencies and associations. The council should assist this group and aid in coordinating its activities.

The Council should appoint an advisory committee to help physicians in establishing rural practice.

Some of the problems in setting up a practice could be simplified with the assistance of a Physician-Laymen Advisory Group. Each situation may require different types of consultants but the core of the organization should include—a lawyer, a physician, an insurance consultant and a banker.

III. INCENTIVES FOR RURAL PRACTICE

The Council should encourage group practice arrangements in rural Oklahoma.

Medical students preparing for rural practice need to be taught the economics, advantages, and disadvantages of shared facilities and personnel. Successful models should be emulated and rural physicians should have the opportunity to visit groups that have made satisfactory joint arrangements. The Council could select models and make arrangements for tours of the state if necessary.

Rural physicians should be encouraged to utilize the services of physicians' assistants.

A recently passed Oklahoma law recognizes a certification program for Physicians' Assistants. The Medical School's Program will graduate its first class this year. These graduates, and other types of physician extenders can be helpful to the rural practitioner. The Council can work with the Board of Medical Examiners, the Medical School and others to make certain that the rules and regulations governing the use of P.A.'s and the training programs provide for the maximum utilization of this new assistant. Successful practices of physicians and physicians' assistant combinations have been established and studied in Washington, Oregon and North Carolina. The Council should inform rural physicians about the Physicians' Assistants Program.

Third parties paying physicians for services should review their payment profiles for rural physicians.

There exist discrepancies between the amounts paid by third parties, for like services, to rural and metropolitan physicians. Regardless of the concept for establishing profiles in the past, it is ridiculous to assume that physicians will seek rural

practices if they will not be paid on the same basis as their metropolitan colleagues. Any and all barriers that prohibit equality of payment should be challenged by the council regardless of to whom the appeal must be made.

Support for proposals offering tax incentives to physicians deserves scrutiny by the Council.

The value of exempting a portion of the rural physician's income from taxes has not been established. If evidence indicates that this type of financial incentive will assist in securing additional health personnel to rural areas then the Council should encourage the adoption of such proposals. To exempt, from taxes (both state and federal) a certain portion of income might be the kind of "secondary gain" necessary to achieve emigration to rural areas. This will probably have to be limited to "critical health workers."

Scholarship programs for medical students agreeing to practice in rural areas should be continued and expanded.

The scholarship programs started by the state legislature and the medical association will produce physicians for rural Oklahoma. The long range effect of these programs can not be evaluated, however, it is obvious that this source will not be sufficient to fill the need. Communities interested in the scholarship programs should be assisted by the Council in starting their own programs or solicited for their money. The Oklahoma Foundation for Community Medical Care may assume this responsibility for the Council—certainly, close liaison should be established with the Chairmen of the Boards of both the Foundation and the Board of Trustees of Rural Loan and Scholarship Fund.

The obligations of the scholarship recipient must be constantly reviewed to assure equity. For instance, it is difficult to decide, with the changes currently being made in medical practice, if communities of under 5,000 will offer successful practice opportunities.

Rural Oklahoma needs a quality emergency medical service system, including transportation and communications.

As health services regionalize it will become increasingly important to be able to transport patients to medical centers. Whether such a

system should be publicly or privately financed will need study by the Council. It is obvious that existing services are inadequate, uncoordinated and underfinanced. Health insurers both public and private should be more realistic in the payment of transportation services. Minimum state standards need to be established for vehicles and personnel with a transition period that does not jeopardize existing services. A coordinated wide area communication system should have a high priority.

Additional community support will be necessary to attract physicians to rural Oklahoma.

Medical Practices, community hospitals and services rendered incident thereto are community assets just as industries are. Not only are the services important to a community but so are the payroll and employment they generate. Communities must realize that to improve and maintain these assets they have to spend money. Too often health facilities and personnel are ignored until they have depreciated beyond restoration, often money is spent to build new facilities in hopes of attracting health personnel when it would have been wiser to expand and improve existing facilities.

The expense of medical facilities and equipment will require greater financial commitment from the public. The cost will have to be shared by groups of communities working together to develop valuable health resources that will benefit ever-widening areas.

The medical school admission policies and procedures should take into account the health needs of rural Oklahoma.

Oklahoma's most desperate medical manpower need is additional primary care physicians in rural areas. Medical School graduates are not filling that need now. While it is grossly unfair to blame the Medical School for all the shortages, there are changes which would offer the rural areas a better chance of getting a physician. They are:

1. More practicing physicians should serve on the Admissions Board.

2. The reliance on academic excellence should be tempered with practical motivation.

3. The student interviews should be

decentralized and some conducted in cities other than Oklahoma City.

4. More primary care physicians should serve on the admissions board than specialists.

5. Pre-medical school curriculum in Oklahoma's smaller colleges and universities should be strengthened in order that more students with rural backgrounds can be admitted to the Medical School.

Representatives of the council have read the report on admission policies of the Medical School and concur in their recommendations; the points made above would expand on those recommendations.

Medical students need more exposure to rural practices.

The student employment program conducted for Freshmen and Sophomore students should be expanded and subsidized by community funds. Many students interested in the program can't afford to leave Oklahoma City because of the expense. Stipends will be necessary to attract the students. In addition the council could make arrangements with practitioners in the rural areas to host medical students at various times during their training.

Many hold the view that the preceptorship program has proven to be valuable in locating physicians in rural areas and could be expanded and improved. Preceptors should be actively recruited by the medical school and if possible more time should be allocated for the preceptor to spend in the rural environment. Students could be encouraged to use elective hours to spend more time in rural areas.

Internship programs need to be improved and increased.

Many of the approved internships in Oklahoma hospitals are not filled. The quality of the programs, especially the conditions under which the intern works, need to be reviewed. Local communities could provide some of the financial support for the internship program.

V. CONTINUING EDUCATION

The family practice program should be expanded, adequately financed and a new program started in Tulsa and elsewhere.

The demand for primary care physicians is greater than the supply that can be produced in existing medical school programs. Therefore, all programs training primary care physicians should be improved. The

Family Practice program was designed to produce a family doctor who would serve as a "generalist"—replenishing the dwindling supply of General Practitioners. However, this program has not been adequately supported by the medical school, the regents or the legislature.

Tulsa with its recently organized Medical Education Foundation would be an ideal additional location for a Family Practice Residency Program.

Residency programs training primary care physicians should receive a greater emphasis than programs training other specialists.

Overwhelming evidence has been produced that the greatest medical need in Oklahoma is the Primary Care Physician. Programs should be changed, funds diverted and priorities shifted to fill this need.

The medical school should consider a "physicians-in-residence" program utilizing non-metropolitan hospitals.

Professors should be given the opportunity to spend time outside the Medical Center. There are physicians in various parts of the state that would host a visiting professor. The professor could serve as a consultant for all physicians in the area and hold brief educational sessions. This type arrangement would give the professor a view of the problems unique to rural Oklahoma, and the local physicians could get first hand information about the problems of the Medical Center . . . A learning-teaching situation that would improve rapport.

VI. ALLOCATION OF SPECIAL FUNDS

Rural projects for regional medical program funds should have top priority.

Regardless of the discriminatory characteristics of the recommendation, the purpose of the council is to improve the quantity and quality of health services in rural Oklahoma. Any advantage offered the rural areas improves that possibility. The original purpose of the RMP Program was to disseminate the most current medical information to the practicing physician. While the goals of RMP have been altered it is still important to the physician in the rural area to be closely tied to the metropolitan medical centers. Practical communication systems could dispel the feelings of isolation and likewise provide consultative

help. Pilot projects utilizing physician extenders could be financed by RMP, as well as training programs for other allied health personnel.

Rural projects requesting public funds for facilities and resources should have priority over requests from metropolitan areas.

If health services are to be improved in our smaller communities, health facilities must be improved. Hill-Burton funds should be spent where most needed with a special priority for the expansion and development of rural hospitals.

The Council should discourage the development of new hospitals with less than 50 beds but should encourage the expansion of facilities where need exists. If guidelines for the allocation of public funds preclude priorities for rural hospitals then studies should be achieved with accompanying recommendations to the Hill-Burton Council and Federal Authorities. Area health planning agencies will have a major role in the development of rural health resources. They should work closely with the Council in establishing development priorities and to advise the Council of discrepancies in allocation of public funds.

VII. REGIONALIZATION OF HEALTH SERVICES

The regionalization of health services should be recognized, accepted and promoted.

Health services, like other goods and services, are being regionalized due to geographic and economic influences. Enid, Ponca City, Ada, Bartlesville, Muskogee, McAlester, Lawton and Ardmore, and other Medical Centers that have a wide range of health personnel and facilities should be further developed. These centers should be encouraged to implement and strengthen training programs for health personnel. Hopefully, the Medical School can extend some of its teaching programs to these regional centers, with both student and teachers having the opportunity of exposure to rural practice. Regional centers will need to make special efforts to relate to the smaller communities in the area, perhaps offering hospital privileges to the more isolated physician and encouraging his participation in educational programs.

Area health planning agencies should be supported by the health profession.

In the future, Health Services will have to be planned and financed on a multi-county basis. Health planning districts offer the opportunity for that support. Granted, Medical Services Areas will expand and contract in relationship to the adequacy and availability of facilities and personnel, but health planning is necessary to avoid duplication of facilities and effort. Agencies with responsibility for planning should carefully avoid jeopardizing existing resources.

Hill-Burton funds should be used to develop rural health facilities and to promote the regionalization of health services.

This point has been made earlier in the report but in order to develop rural health resources it will be necessary to give them a priority. In 1972 the state Hill-Burton Council recommended allocations of \$16.8 million. Only \$6.9 million was allocated to projects outside Tulsa and Oklahoma counties. While teaching institutions benefit the entire state, more of these funds in rural areas might encourage the implementation of new programs.

VIII. PUBLIC SUPPORT

The public must be made aware of the status of health care in rural Oklahoma.

To improve and develop health resources in rural Oklahoma, the Health profession will need public support. The Health Sciences Center plans a health fair for this purpose and the Council could become involved in the project. In addition, the Council could commission a qualified reporter to prepare a series of articles for distribution to the state's newspapers. Special television documentaries would help as would emphasis by other media.

Oklahoma's Chambers of Commerce would be valuable in disseminating such information.

Public health services should become regionalized, with multi-county support and greater administrative ability.

A project of this nature has been implemented in Southeastern Oklahoma and has proven successful. Similar programs should be started in other parts of the state. Relieving physicians, acting as county health officers, of administrative details gives him more time to practice medicine.

Resolution No. 4 (DISAPPROVED)

SUBMITTED BY: Logan County Medical Society

TITLE: Quality Medical Care

REFERRED TO: Reference Committee No. II

WHEREAS, a considerable pressure has appeared in Congress to broaden government health subsidies to all the population under a concept known as National Health Insurance, and

WHEREAS, no verifiable need for such programs has been demonstrated, and

WHEREAS, present government health programs have proven unduly expensive, disruptive of the patient-physician relation, and deleterious to quality medical care, therefore

BE IT RESOLVED that the Oklahoma State Medical Association is opposed to any expansion of government health programs and will hereinafter in no way participate in said government health programs until after the defects are eliminated from those already extant, and

BE IT FURTHER RESOLVED that the Association inform the Oklahoma Congressional delegation of this resolution.

Resolution No. 5 (DISAPPROVED)

SUBMITTED BY: Kingfisher County Medical Society

TITLE: Quality Medical Care

REFERRED TO: Reference Committee No. II

WHEREAS, a considerable pressure has appeared in Congress to broaden government health subsidies to all the population under a concept known as National Health Insurance, and

WHEREAS, no verifiable need for such programs has been demonstrated, and

WHEREAS, present government health programs have proven unduly expensive, disruptive of the patient-physician relation, and deleterious to quality medical care, therefore

BE IT RESOLVED that the Oklahoma State Medical Association is opposed to any expansion of government health programs until after the defects are eliminated from those already in existence, and

BE IT FURTHER RESOLVED that the Association inform the Oklahoma Congressional delegation of this resolution.

(Late Resolution) Resolution No. 13

(APPROVED AS AMENDED)

SUBMITTED BY: OSMA Legislative Committee

TITLE: OSMA Position on Abortion
REFERRED TO: Reference Committee No. II

WHEREAS, the question of elective abortion is becoming more prominent in the public and legislative mind; and

WHEREAS, eighteen states, five of which border the state of Oklahoma, have altered their abortion laws; and

WHEREAS, bills to change the abortion laws have been introduced in the past two sessions of the Oklahoma legislature; and

WHEREAS, there are a sufficient number of physicians who express strong views both for and against abortions so as to create confusion about the position of organized medicine, and

WHEREAS, OSMA has taken a "no position" in regard to abortion legislation although they have provided medical testimony; and

WHEREAS, more legislative action is anticipated in the upcoming legislature; and

WHEREAS, the Legislative Committee is often challenged by physicians, the legislature and the public about its "no position" position; and

WHEREAS, it would be beneficial to members of OSMA, the Legislative Committee, the legislature and the public to have OSMA's position on abortion clearly stated; now be it "for," "against" or re-affirm the "no position"

THEREFORE BE IT RESOLVED that the House of Delegates through whatever mechanism it desires, establish a position on abortion; and

BE IT FURTHER RESOLVED that the position be transmitted to all OSMA members as the official position of the Oklahoma State Medical Association.

Recommendations:

1. That the OSMA Board of Trustees develop a survey form to be submitted to the association's members inquiring of their attitude on abortion; that the survey include a question regarding the specialty practiced by the respondent and his opinion as to whether or not the Oklahoma State Medical Association should take a position on the abortion question.

2. That there should be a question added to the questionnaire as to the doctor's opinion on the delivery of contraceptive services to sexually ac-

tive minors without their parent's consent.

3. That the results of this survey, when tabulated, be furnished to OSMA members, the legislature, and the public.

(Late Resolution)

Resolution No. 15

(APPROVED)

SUBMITTED BY: Tulsa County Medical Society

TITLE: Training and Certification in Nuclear Medicine

REFERRED TO: Reference Committee No. II

WHEREAS, in December, 1971 the House of Delegates of the American Medical Association directed the Council on Medical Education to establish an ad hoc committee, in cooperation with the American Board of Medical Specialties, with representation from appropriate specialty societies and boards, to study the current problems related to certification in nuclear medicine and to suggest solutions to these problems; and

WHEREAS, in pursuance of this directive the Council on Medical Education convened such an ad hoc committee on December 21, 1971 which unanimously agreed, "Subcertification in the specialty field of a conjoint board may be a function of one of the primary sponsoring boards, provided that such subcertification is done in cooperation with the conjoint board with respect to the qualifications of candidates, the standards of examination, the manner of certification and the form of certificate"; and

WHEREAS, the American Board of Pathology and the American Board of Radiology met subsequently with the members of the Conjoint American Board of Nuclear Medicine and achieved agreement that the American Board of Pathology and the American Board of Radiology would request permission to subcertify in nuclear radiology and radioisotopic pathology; and

WHEREAS, this compromise was accepted by the Liaison Committee of the Council on Medical Education and the American Board of Medical Specialties, the Executive Committee of the American Board of Medical Specialties and the Council on Medical Education; and

WHEREAS, the compromise was then disapproved by the full American Board of Medical Specialties; and

WHEREAS, the ultimate authority in matters pertaining to graduate medical education resides in the House of Delegates of the American Medical Association;

THEREFORE, BE IT RESOLVED, that the Oklahoma State Medical Society petitions the House of Delegates of the American Medical Association to recognize that the American Board of Radiology and the American Board of Pathology offer examination in the fields of nuclear radiology and radioisotopic pathology to candidates who are appropriately trained and that those who pass examinations in these fields of radiology and pathology are capable within their fields and should be so recognized by insurers, agencies of government, hospitals and members of the medical profession.

Report of the COUNCIL ON SOCIO-ECONOMIC ACTIVITIES

(APPROVED)

Council Members

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Chairman

Ann K. Kent, MD, Muskogee

Roger J. Reid, MD, Ardmore

Charles Bodine, MD, Oklahoma City

Thurman Shuller, MD, McAlester

Walter E. Brown, MD, Tulsa

Richard E. Carpenter, MD, Oklahoma City

E. N. Lubin, MD, Tulsa

Howard B. Keith, MD, Shattuck

Richard W. Loy, MD, Pawhuska

James P. Bell, MD, Oklahoma City

Scott Hendren, MD, Oklahoma City

Robert Sukman, MD, Oklahoma City

Harold Stout, MD, Waurika

Arthur E. Schmidt, MD, Oklahoma City

Arnold G. Nelson, MD, Midwest City

Mrs. George Miller, Tulsa

Occupational Medicine Committee

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Chairman

Robert R. Dugan, MD, Oklahoma City

Kieffer D. Davis, MD, Bartlesville

R. L. Lembke, MD, Ponca City

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Robert G. Perryman, MD, Tulsa

James D. Green, MD, Cushing

Samuel C. Jack, MD, Lawton

Bob J. Rutledge, MD, Oklahoma City

W. Frank Phelps, MD, Tulsa

Casper H. Smith, MD, Duncan

Gifford H. Henry, MD, Tulsa

Mark A. Everett, MD, Oklahoma City
 Jack L. Richardson, MD, Tulsa
 C. J. Sternhagen, MD, Oklahoma City
 James G. Moore, MD, Tulsa
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 Mark R. Johnson, MD, Oklahoma
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 Ross Deputy, MD, Clinton
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 Committee*
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 D. Kent Braden, MD, Oklahoma City
 Neil B. Kimerer, MD, Oklahoma City
 William R. Smith, MD, Enid

SECTION I

Occupational Medicine Committee

The passage of Williams-Steiger Occupational Safety and Health Act of 1970 and its subsequent implementation by the U.S. Department of Labor is increasing the demand for professional medical advice in setting up new and enlarged employee health and safety programs. Under provisions of the Act virtually all businesses engaged in interstate commerce are covered. While the Act does not contradict good preventative and Occupational medicine practices, it does set forth procedures for the handling of occupational safety and health programs. Physicians who need additional information should contact the AMA's Department of Environmental Public, and Occupational Health or the U.S. Department of Labor.

In addition to federal legislation, certain action at the state level could have serious ramifications. The 32nd Oklahoma Legislature set up an Occupational Health and Safety Standards Commission and a Health and Safety Education and Training Division. Your committee recommended at the time of passage that a physician be appointed to the Board. Not until this year was the Board activated. Subsequent sessions of the legislature have made changes in the act but at this time new rules and regulations have not been adopted. Your committee maintains a liaison with leaders in Labor and Industrial Management and have offered our help should it be needed and wanted.

Laws to make changes in the Oklahoma Workmen's Compensation Act were introduced during the last session. The bills supported by the committee — waiver rights and medical

panel — were not favorably considered by the Legislature. Organized Labor is making every effort to pass legislation that would permit an injured worker to select his "choice of practitioner in the healing arts." This would permit chiropractors to treat workmen's compensation cases — a situation we feel not in the best interest of the injured worker. There have also been efforts to pass a "free choice of physician" bill which also creates problems. Where will boundaries be established? and by whom?

Your Chairman attended the Congress on Occupational Health last fall and as a result, your committee has secured information on the Occupational Health and Safety Programs of various states, and the most current information on new federal laws.

As Oklahoma becomes more industrialized, it will become increasingly important that organized medicine become more involved in Occupational Health Problems.

Recommendations:

That the Committee continue its activities and inform OSMA members of important developments in Occupational Health and Safety.

SECTION II

Prepaid Medical Care Committee

At the 1971 annual meeting of the House of Delegates, Resolution No. 14, entitled "Blue Shield UCR Program," was adopted and referred to the Pre-Paid Medical Care Committee.

In brief, the resolution reminded Blue Shield that the 1968 OSMA agreement endorsing a program to pay physicians their "Usual, Customary and Reasonable" fees contained a provision for an optional claim form whereby an OSMA member could elect, case-by-case, whether or not he would be bound by UCR. The resolution also stated that after September 1, 1971 the members of the association shall no longer be obligated under the program as outlined in the agreement passed by the House of Delegates in 1968. Moreover, the resolution requested Blue Shield to devise a method whereby it shall be readily apparent on a member's Blue Shield card that he is the holder of a UCR contract.

The Prepaid Medical Care Committee met with Blue Shield representatives in their Tulsa headquarters, at Blue Shield's request, to discuss the features of Resolution No.

14. The OSMA committee's vice-chairman chaired the meeting.

The OSMA Executive Director was asked to provide the group with background information on the problem.

He said the UCR program was originally the product of the Oklahoma Health Economic Council, an organization created in 1965 to survey the quality and quantity of health insurance held by Oklahomans and to formulate appropriate recommendations. Some 1,500 hospitalized patients were surveyed as to how they would pay their medical and hospital bills. The survey revealed that both the quantity and quality of health insurance were low; it also showed that Blue Cross and Blue Shield ranked generally better than commercial insurance companies.

The UCR program was subsequently recommended to the OSMA House of Delegates as a program of predictable value for the patient and as a means where most physicians would have their bills paid in full. The final authority for peer review was to be vested in the OSMA.

The House of Delegates endorsed the program in 1968, and also named Blue Shield as its preferred fiscal carrier.

However, regarding Resolution No. 14, the OSMA Executive Director quoted directly from the 1968 agreement, as follows:

"Payment will be made directly to physicians for services provided under the program, unless Blue Shield is directed by the physician to make payment directly to the patient.

"A physician may accept or reject a UCR fee on each and every claim submitted to Blue Shield. (Therefore, each and every claim is an independent contract in itself). If UCR is refused, payment will be based on the physician's previously accepted usual charge or the average charge in the physician's socio-economic area, whichever is the greater. This payment will be made to the patient."

Blue Shield implied concurrence with this feature of the 1968 agreement because it subsequently developed a form which gave the physician the privilege of opting out of the UCR arrangement provided he would establish a "prior agreement" with the patient. This form was felt to be

unacceptable by physicians, and another form was drafted by representatives of the OSMA, representatives of Blue Shield and representatives of the Tulsa County Medical Society.

However, this revised form was set aside by Blue Shield in favor of simply using the standard claim form, again extending the doctor the privilege of staying outside the UCR plan through a prior agreement with his patient.

Mr. Blair said Resolution No. 14 was an effort to return to the provision in the 1968 agreement which authorized a specific optional claim form.

At the 1971 meeting with Blue Shield representatives, it was reported that UCR had been endorsed by the AMA and was now in wide use in government programs and in large national accounts. It was reported that Oklahoma was the first state to get CHAMPUS (dependents of servicemen) to change from a fixed fee schedule to UCR.

Blue Shield officials said the optional claim form would make it impossible for Blue Shield to sell the program either to government or to industry, but reiterated that it is still possible to stay outside the plan through prior agreement with the patient.

Regarding the request in Resolution No. 14 for an identifiable UCR membership card, Blue Shield officials said that it was now possible to identify many UCR patients, as explained in the "Physicians Manual" which has been distributed to all state physicians (local accounts are designated in the fifth digit position by the letter "B," federal employees' cards are marked "high option," and all CHAMPUS patients carry a distinctive card). Identification of national accounts is still a problem, but a national Blue Shield committee is at work to design standardized nomenclature for all state plans.

There was much discussion as to whether or not it was proper for the OSMA House of Delegates to attempt to make binding agreements involving methods of compensation to be followed by all association members. Blue Shield representatives suggested the prospect of individual UCR contracts for every doctor in the state who may wish to participate in the plan.

Finally, the OSMA Prepaid Medi-

cal Care Committee took the following actions:

1. With regard to the optional claim form, the committee agreed with Blue Shield that the use of such a form would compromise their ability to sell it (the employer considering UCR coverage wants to be certain that paid-in-full benefits are guaranteed, except where the patient makes a private agreement with the doctor). The committee questioned the action of the House of Delegates in 1968 to enter into a financial agreement binding on the membership; rather, the committee felt individual participation contracts would be preferred, and voted to recommend to the OSMA Board of Trustees that the committee be authorized to work with Blue Shield in developing an enrollment program.

2. With regard to the second "resolved" of the resolution (that no member would be automatically bound under the UCR program after September 1st), the committee decided that the statement did not withdraw OSMA support for the UCR program, and voted to ask the association's Board of Trustees to affirm this interpretation.

3. With regard to the "resolved" calling for a standard identification system, the committee recognized that Blue Shield is attempting to resolve the problem.

The foregoing recommendations were presented to the OSMA Board of Trustees on November 14, 1971, but the report was tabled.

SECTION III

Governmental Relations Committee

The Oklahoma State Medical Association Governmental Relations Committee has been concerned that the Part A Intermediary (Oklahoma Blue Cross) under Medicare has been disallowing some hospital charges either in full or in part for persons covered under Medicare. The committee's concern was whether or not this disallowance by the Part A Intermediary would affect payment for in-hospital physicians' services on a claim where hospital charges were denied in full or in part. Claims, for physicians' services, under Medicare are processed by the Aetna Life and Casualty Company and the Oklahoma Department of Institutions, Social and Rehabilitative Services. An inquiry was made to the Aetna Life and Casualty Company as to what effect, if any, would a denial of benefits by

the Part A Intermediary have upon payment for physicians' services. The Committee was advised that the Part B carriers receive a copy of the denial letter of the Part A Intermediary. It is the policy of the Part B carrier (Aetna Life and Casualty Company) to then review the claim in question as to medical necessity for all or part of the physicians' services rendered while the patient was confined. Their determination as to medical necessity is independent of the Part A Intermediary's determination although consideration is given to the reasons for denial by the Part A Intermediary. Representatives of the Aetna Life and Casualty Company state that in many instances physicians' services are required even though the level of care in the hospital might not be indicated.

The Governmental Relations Committee of OSMA has requested that they be kept advised by the Part B carrier of any changes permitted under Bureau of Health Insurance regulations affecting a physician's statistical charge data. Recently the Committee was advised that the physicians' charge data under Medicare would be updated for fiscal year 1973 as follows:

"SSA has approved a method of calculating the reasonable charge screens to be used in fiscal year 1973 to implement the price commission's ruling referred to in Part B IL 72-6.

"This method calls for comparing each reasonable charge now in effect (i.e., based on 1970 data) with the reasonable charge for the same service or item that would have been calculated (based on 1971 data) for use in fiscal year 1973 if there were no special price commission rules. The reasonable charge to be used in fiscal year 1973 need not be adjusted if it is equal to or less than the reasonable charge for fiscal year 1972.

"Where the reasonable charge for fiscal year 1973 is higher, it will be adjusted by reducing it by 60 percent of the amount of the increase. For example, in 1970, a physician's customary charge for procedure X was \$8, and the prevailing charge was \$7, so that his current reasonable charge is \$7. Throughout 1971, he charged \$8, and the prevailing charge was \$8, so that his reasonable charge for fiscal year 1973 would be \$8 in the absence of the price commission's ruling. Under the method

described above the reasonable charge for fiscal year 1973 will be equal to \$8 minus 60 percent of the \$1 increase for a total of \$7.40. The effect of these adjustments will be to limit aggregate reasonable charge increases to 2.5 percent throughout fiscal year 1973. Where a physician has no 1970 customary charge data for a given item or service but a reasonable charge can be established on the basis of 1971 data, the reasonable charge to be used in fiscal year 1973 will be calculated by comparing the prevailing charge for that procedure based on 1970 data to the physician's reasonable charge based on 1971 data. If the reasonable charge for fiscal year 1973 is higher, it must be adjusted by reducing it by 60 percent of the difference."

SECTION IV

Medical Insurance Review Committee

Your association has maintained a peer review mechanism to adjudicate claims since July 1, 1966. As of the end of February this year, the committee had reviewed a total of 469 claims since its inception. In 133 of those claims it agreed with the physician, in 156 it agreed with the carrier and in 117 there was a compromise of some nature.

Due to state laws, federal regulations, and the Blue Shield report adopted by this House of Delegates several years ago, the committee performs in three ways:

1. Whenever the committee reviews a case for Blue Shield or any other insurance company paying on usual, customary, and reasonable basis, the committee serves as a fee arbitrator. It determines whether or not the fee in question was "reasonable" in view of the work performed.

2. Whenever the committee reviews a case for the Department of Institutions, Social and Rehabilitative Services, it serves in a true "peer review" capacity in that it reviews medical necessity or utilization of physician time and treatment. In this regard, to some extent it passes on "quality of care." Anytime the committee makes a fee recommendation to DISRS it does so with the knowledge that it will probably not be honored due to state laws and federal regulations regarding the amounts that can be paid. (Unless there are unusual circumstances surrounding the rendering of any medical treatment, DISRS is limited to paying an

amount up to or equal the prevailing fee for the area. Even if our committee finds there were "unusual circumstances," it is still necessary for DISRS to hold a separate hearing and make the same determination before a higher fee can be paid.)

3. Whenever the committee hears a case for Aetna it serves in a dual capacity as both a fee arbitrator and a reviewer of medical necessity or utilization. (The Medicare carrier appears to have more leeway in the payment of claims than DISRS.)

The following is a statistical breakdown of cases heard since January 1, 1971 up until March 30th of this year. It should be understood that the term "cases" as used below does not necessarily mean that the committee considered a single claim. In one case over 100 claims were involved. It is not uncommon for a single case to involve 20 to 30 claims.

Aetna-Medicare: A total of 30 cases were heard, eight were decided in favor of the physician while the committee upheld Aetna in 19. A compromise was recommended in three cases.

Department of Institutions, Social and Rehabilitative Services: Twenty-five cases were heard by the committee. In 15 cases the committee agreed with the physician, a compromise was recommended in one case, and in nine cases the committee agreed with the carrier. (The final decision is still pending in the case involving over 100 claims, mentioned above. For statistical purposes this case is carried as being decided in favor of the carrier.)

Travelers: This company brought 16 UCR fee disputes to the committee, four of them were compromised, and six each were decided in favor of the physician and the carrier.

Others: Five cases were brought to the committee's attention by other insurance companies paying on a usual, customary, and reasonable fee basis. Two were settled in favor of the physician, two in favor of the carrier, and one was compromised.

Blue Shield: It should be noted that Blue Shield is the only carrier which presents a fee recommendation to the committee for consideration. In the 80 cases considered since January 1 of last year the committee has upheld the physician's fee 22 times, agreed with the carrier's recommendation 27 times, and has recommended a compromise in 31 cases.

(During calendar year 1971 a total of 64 cases were heard involving Oklahoma Blue Shield. Most of these were brought to the committee by the plan. The total amount of physician's fees involved, before the committee heard the cases, amounted to \$28,808.25. Blue Shield's Internal Advisory Committee had offered \$20,095 as settlement in full. The OSMA Insurance Review Committee recommended payment of \$24,290. The difference between recommendations by Blue Shield's Internal Advisory Committee and the OSMA Insurance Review Committee amounted to \$4,195.)

It is anticipated that sometime in the future the functions of this committee will be taken over by the Oklahoma Foundation for Peer Review. However, until such time your committee will continue to meet on a regular basis and review the cases submitted to it.

One of the primary problems often encountered by the committee is a physician's lack of understanding as to why Medicare and Medicaid should have the right to review any claim at all. While acknowledging the existence of these two programs, and acknowledging that their patients are participating in these programs, they oftentimes feel that it is simply "government intervention" whenever one of these programs requests additional information or asks for a review of the claim.

Anytime governmental dollars (tax dollars) are used to purchase services or products . . . anything from medical care to the C-5A . . . the government must retain the right to inspect the work done, to receive the necessary assurances that the work was needed, that it was in fact done, and that it was done in a proper fashion. This holds true whether the contract is for medical care, janitorial services, or the building of a huge aircraft. The government not only has this right, but it is a right that must be exercised if the government is to protect the expenditure of tax monies.

Many physicians do not realize that it is not necessary for Medicare or the Department of Institutions, Social and Rehabilitative Services to consult the OSMA Insurance Review Committee at all. These agencies do so out of courtesy and concern for their clients and for our patients. By

law they could simply disallow the claim whether filed by the physician or the patient and there would be nothing further that could be done. Instead, however, they choose to work with a committee of physicians . . . MDs who travel from throughout the state to Oklahoma City once a month to donate their services to review claims . . . in order to see that both physicians and patients are treated fairly and that the government, as it must, is getting the maximum amount of return for its tax dollars.

In every instance where they can the two governmental programs abide by the decisions of your committee. There are instances, as stated above, where the committee decisions cannot be honored. However, this does not lessen the importance of the committee. The physician whose claims have been reviewed has the satisfaction of knowing that even if the agency cannot pay the higher fee recommended, at least a group of his peers . . . other practicing physicians . . . feel that his fees are reasonable. In addition this committee decision regarding his fees will be kept on file with the two agencies and used whenever they are allowed to update physician's fee profiles, which often results in the increasing of the prevailing fee for the area.

Another problem frequently encountered by the committee is a lack of understanding of the so-called usual, customary, and reasonable (UCR) payment concept. This type of payment mechanism is used by a number of different companies, including Travelers, Aetna, Blue Shield, Metropolitan, Deere and Company, and others.

Many physicians tend to view UCR as simply a mechanism to "fix fees" or as a "fee schedule" contract. They become greatly irritated whenever one of their claims is submitted to our committee for review and immediately think, and often say, that the committee is simply a "tool of the insurance company."

In all truth and fact, for nearly all the physicians in Oklahoma the UCR contract pays 100% of their bill 100% of the time. For a few, those physicians whose fees are higher than their colleagues in the same area, the UCR contract will not pay their entire fee. If they can show that any given claim was an unusual situation and required extra effort then

the higher fee will be paid . . . but not on a regular basis.

As an example of how fair the UCR mechanism can be, Blue Shield can be taken as an example. Since January 1 of last year Blue Shield has processed and paid over 105 thousand UCR claims. Most of these were paid 100 cents on the dollar immediately. Of this vast number only 80 required arbitration by this committee. This statistic alone tells us that the UCR concept of payment is fair and workable.

Another problem frequently encountered by the committee can be traced back to our name, "Insurance Review Committee." Many of our members, and some insurance companies, feel that the committee is strictly for the review of insurance claims. As stated above, the committee goes beyond this, and is a true "peer review" committee. Therefore, since our committee is going to continue functioning until such time as the Oklahoma Foundation for Peer Review is fully activated, we would like to make the following recommendations:

Recommendations:

1. It is recommended that the name of the "Insurance Review Committee" be changed to the "Peer Review Committee" of the OSMA.

Report of the COUNCIL ON PROFESSIONAL AND INTERVOCATIONAL RELATIONS (APPROVED AS AMENDED)

Council Members

Orange M. Welborn, MD, Ada, Chairman

M. Joe Crosthwait, MD, Midwest City

E. Edwin Fair, MD, Ponca City

Frank W. Clark, MD, Ardmore

Bryce O. Bliss, MD, Tulsa

Edgar W. Young, Jr., MD, El Reno

Jack L. Richardson, MD, Tulsa

Joe L. Duer, MD, Woodward

E. D. Padberg, MD, Ada

Averill O. Stowell, MD, Tulsa

Hugh Perry, Jr., MD, Tulsa

Mrs. W. J. Williams, Bethany

Committee on

Health Related Professions

John A. McIntyre, MD, Enid, Chairman

Edgar W. Young, Jr., MD, El Reno

Thomas E. Rhea, MD, Idabel

Robert J. Hogue, Jr., MD, Guthrie

Hayden H. Donahue, MD, Norman

Harold W. Calhoon, MD, Tulsa

Francis R. First, MD, Checotah

B. C. Chatham, MD, Chickasha
Medical-Legal Relations Committee
 Jack L. Richardson, MD, Tulsa,
 Chairman
 Walter E. Brown, MD, Tulsa
 Edgar W. Young, Jr., MD, El Reno
 Worth M. Gross, MD, Tulsa
 Richard H. Burgtorf, MD, Shattuck
 Joseph F. Messenbaugh, III, MD,
 Oklahoma City
 Myra A. Peters, MD, Tulsa
 Marvin K. Margo, MD, Oklahoma
 City
 Richard G. Dotter, MD, Oklahoma
 City
 Ollie W. Dehart, MD, Vinita

SECTION I THE COUNCIL

Liaison between the Medical Association and other professional and vocational organizations is maintained through the Council on Professional and Intervocational Relations. In past years the Council was broken into the following eight committees: Health Related Professions, Medical-Dental Liaison, Medical-Legal Relations, Medicine and Religion, Committee on Nursing, Committee on Osteopathy, Committee on Pharmacy, and the Cults and Quackery Committee.

Due to relative inactivity in previous years, during administrative year 1971-72, it was felt that the Council should carry out the liaison function of all of the committees. Therefore, the President of the association did not name members to each committee; he did name a member to the Council to serve as a committee chairman in the event that such a committee was needed. This change from previous years seems to have worked out quite well.

The Council continued to compile a document file on the practice of chiropractic in Oklahoma and nationwide. A large quantity of the material that had been collected was distributed to members of the Oklahoma Senate and House of Representatives. In particular, each received a copy of the book "At Your Own Risk, The Case Against Chiropractic" and a copy of the Health, Education and Welfare Department's report on "Independent Practitioners."

During the year the Council chairman was contacted by a member of the Oklahoma Claimsmen Association, Inc., concerning the establishment of a guideline for understanding between members of their association and the OSMA. Since every phy-

sician in Oklahoma deals directly with claims adjusters and insurance representatives, this seemed to be an appropriate program for consideration by the Council. The President of the association concurred and directed the Chairman to establish formal liaison with the group. However, since the request for liaison came late in the administrative year, the Council has not yet functioned in this regard.

SECTION II MEDICAL-LEGAL RELATIONS COMMITTEE

During the past year the Medical-Legal Relations Committee has met on six different occasions. Three main topics of discussion dominated each meeting: the updating of the Interprofessional Code, the planning of a Medical-Legal Institute for July 21 and 22 of this year, and the arbitration of a number of grievances between physicians and attorneys.

Nine disputes between physicians and attorneys were arbitrated during the year. Eight of the disputes were settled amiably, while one is still pending.

The Medical-Legal Institute Program has been finalized. To be held in the Arrowhead State Lodge on Lake Eufaula, the Institute will be two days long. Topics to be discussed will include Professional Corporations, Uniform Commercial Code Malpractice Arbitration, the New Medical Examiner / Unexplained Death Law, Workmen's Compensation, the Physician As A Witness, and a new Interprofessional Code.

Since the Medical-Legal Institute is a joint function of the Oklahoma Bar Association and the OSMA, the joint committee members felt that it was best that it be self-sustaining. Therefore, a \$40 per person registration fee is being charged. In past years the Institute has paid for itself, and usually shows a small profit. The profit is used as "seed money" for the next institute. The institutes are held every two years.

Much of the last administrative year for the Medical-Legal Relations Committee was spent in attempting to update the Medical-Legal Interprofessional Code. The code was originally adopted by the OSMA and the Oklahoma Bar Association several years ago. Since that time a number of shortcomings in the code had become evident.

Your joint committee expended many man-hours to rewrite the code.

After the committee had approved the new code it was submitted to the Oklahoma Bar Association's House of Delegates and unanimously adopted in early December. The code is now submitted, herewith, to the OSMA House of Delegates for consideration.

Proposed Medical-Legal Interprofessional Code Preamble

The current code of ethics of the medical profession and the code of professional responsibility of the Bar are hereby adopted by reference as though set out herein. The professions of law and medicine owe a mutual cooperative duty to the courts and the American people. That duty and obligation is better executed when each profession has and exercises respectful understanding and cooperation. Justice is, and must always be our mutual goal, unhampered by ignorance, laziness, incompetence, perjury or self-service at the expense of justice.

Basic Considerations

We recognize as basic that the ethical code of both professions must be adhered to; that freedom of choice for patient or client applies both to physicians and attorneys. We further recognize that an honest cooperative attitude is needed within each profession for the members thereof and that the greatest element necessary to the success of this interprofessional code is the exercise of the Golden Rule intraprofessionally by both physicians and attorneys. Emotional instability, egotistic self-service, incompetence, flamboyant exhibitionism, dictatorial dominance, reckless and careless disregard for truth are likewise foreign and inimical to our mutual objective. The oath is a serious solemn vow not to be taken lightly nor handled carelessly. Justice, being our mutual goal, must never be sacrificed to satisfy personal convenience or monetary whims. Every litigant is entitled to his day in court, equal opportunity to present his claim unhampered by personal convenience or financial status. The physician is not a partisan in litigation and is devoid of bias, prejudice and personal interest and the attorney is the advocate representing his side of litigation to the best of his ability with an object of justice.

Medical Reports

Justice demands that all evidence necessary to establish the merits of

litigation be available to the court and jury. Common sense dictates that all information which would allow an attorney to determine whether or not proposed litigation has merit should be made available to him. The fact that it may be difficult to procure or inconvenient to present is not an acceptable excuse for failure to do so in either case.

If an attorney presents to a physician a proper authorization for release of medical information signed by the patient and waiving the privilege existing between the patient and the physician, then the physician is obligated to provide access to or copies of his records involving such patient. This includes the medical history of the patient, results of the physical examination of the patient, the X-ray evaluation and other testing evaluations, together with an explanation of the treatment instituted by the physician and, if possible, a prognosis.

The attorney should give consideration to the convenience of the physician and his office staff and allow a reasonable time for the production of this information. The attorney should acknowledge that it is his obligation to pay for any such reports that he requests.

Medical Examinations

The statutes of the state of Oklahoma provide that whenever a person is "authorized, requested, or required by any court or adverse party to submit to a physical or mental examination," he is entitled to a copy of the physician's written medical report with respect to such examination or treatment. The report is to be "furnished free of charge to such examinee, or his attorney, before or simultaneously with the transmission of such written reports or the contents thereof . . ." to any other party. However, in order to receive a copy of the report the examinee must serve a written demand for such copy on all attorneys of record. If the report is not delivered, the court shall "exclude all or any part of the testimony of such practitioner, or make such other order as justice requires." (12 OSA 425)

Since the statute does not provide that the examining physician is to receive a copy of the demand for a report, it is necessary for the attor-

ney requesting the examination to so inform him of the demand.

The examination of a patient, for either physical or mental reasons, must be conducted in privacy. An attorney may accompany the patient to the physician's office and wait in his reception room, but he may not be physically present in the examination room without the physician's specific authority. The presence of non-medical personnel in the examining room is detrimental to the concentration necessary for a complete examination.

Conference

Conferences between attorneys and physicians at different stages of litigation, including pretrial, are essential if the ends of justice are to be served. Arrangements for the conference by the attorney should be scheduled to best serve the convenience and conserve the time of both attorney and physician.

Conferences serve a double purpose. The most important purpose is to help the attorney prepare his case by becoming more familiar with its medical aspects. It also serves to prepare the physician for his possible appearance in court. The attorney should make it clear to all parties, especially his client, that the conference is not to influence the physician's testimony in any manner concerning his examinations, reports, or the subject matter thereof.

In addition, the attorney should make it clear to the physician that he will be compensated for his conference services and by whom. Patient-clients frequently do not understand that compensation is due and proper under such circumstances.

Subpoena

The subpoena is a legal process to compel the attendance of a witness in court. Subpoena duces tecum is a subpoena ordering the witness to bring with him all books, documents, office records, or other evidence described.

Although the subpoena is a necessary and indispensable writ of justice, it is somewhat frightening to someone unfamiliar with our judicial system. If an attorney finds it necessary to have a physician subpoenaed he should contact the physician beforehand telling him of the subpoena and explaining its necessity.

The subpoena of a medical witness, expert or otherwise, without prior notice or a conference, and

without any attempted understanding and agreement as to compensation, will be considered improper conduct.

Medical Testimony

In many cases of litigation, especially personal injury, justice requires the procurement and presentation of medical testimony. When a physician has *treated* a patient, it is the physician's professional obligation to appear in court or to provide testimony by deposition when requested to do so by the patient. There are situations where physicians have *only examined* an individual for the purpose of preparing a medical report and possibly offering testimony. In either situation, the physician's obligation ceases when he has adequately presented the facts of the case and expresses his best judgment in an objective manner. It should be understood by all parties concerned that it is not ethical for a physician to become an advocate of either side in a lawsuit, that being the exclusive role of the attorney.

It is recommended that prior to a physician's appearance in court, he should be thoroughly briefed by the attorney as to what to expect. Definite arrangements should be made for the physician to set aside a designated time, on a standby basis, to appear at the courthouse. In addition, he should be further notified approximately one hour before his services are needed.

The physician should appear as promptly as possible for testimony at the designated time. The attorney should not require the physician to wait around the courthouse before testifying. Attorneys, when possible, can further reduce the waiting time by asking the court's indulgence to allow the medical witness to testify "out of turn."

It is recognized that the courts of Oklahoma have been extremely cooperative, considerate, and courteous in allowing physicians to testify without undue delay. Even when testifying in response to a subpoena, the courts almost without exception permit medical witnesses to appear "out of turn" and to be placed "on call."

In testifying, the physician must answer questions as concisely and objectively as possible, while avoiding bias, favoritism or personal interest. He is admonished to use language understandable to the court. Whenever it is necessary to use scientific

language, its meaning should be carefully explained to the court in understandable terms.

Cross examination is an integral part of courtroom testimony. The physician should be courteous to the cross examiner, and vice versa. Emotional flares have no value in court. They only serve to lower the dignity of the proceedings and hinder the cause of justice. The examination of the medical witness should be conducted in a dignified and respectful manner. The relationship of the attorney and physician should be founded on mutual respect, talents, courtesy, and candor.

It has long been recognized by the medical profession that there can be honest and competent differences of medical opinion.

Compensation

Physicians shall never participate, nor testify, on a contingent fee basis. Neither his fee, or the amount thereof, shall be influenced by or dependent upon the outcome of litigation. The attorney may, and frequently does, represent his client on a contingent fee basis.

Where the physician has been treating the patient, the primary obligation to pay for that treatment rests with the patient-client. Anytime an attorney refers a client to a physician for *examination and report*, the attorney has the primary obligation to pay the physician's fee.

When the attorney has referred the patient to the physician, he has the primary obligation of paying for all medical reports requested from the physician and paying for testimony and all consultations with the physician. In this case the physician's fee is simply a necessary part of the attorney's preparation for the lawsuit.

When the attorney is dealing with the treating physician, the primary obligation for paying for reports, consultations and testimony rests with the patient. However, since patients frequently do not understand that compensation is due and proper under such circumstances, it is recommended that a proper written commitment be sent to the physician signed by both the attorney and the patient acknowledging that any outstanding indebtedness for medical care, reasonable costs of reports, medical consultation fees, and testimony fees will be owed by the patient regardless of whether or not a recovery

is made. Further, the commitment should pledge that the attorney will protect the physician's fees in the event of a recovery.

Although a physician's fees for medical reports, consultations and testimony should be reasonable and in accordance with the prevailing practices in his community for a similar service, they should be discussed in advance of any service and an agreement reached between the physician and the attorney with the consent of his client. The physician may elect to wait for his fee, reduce it, or cancel it altogether, but it cannot be contingent on nor subject to fluctuation on the amount of any recovery.

Attorneys are urged to request authorization and assignment from their clients for the payment of any and all physician fees in conjunction with litigation. However, in cases where such an assignment was not made, the attorney has the obligation to do everything ethical and reasonable to see that the physician is paid for his services and no charge shall be made to the physician for this service. In the event the client refuses payment, the attorney should notify the physician of this fact promptly.

A reasonable expert fee is a proper and necessary item of expense in litigation involving medical facts. When, however, a physician has been requested to testify and the case is settled prior to trial, a usual and customary expert witness fee should be paid the physician unless he has been given at least 48 hours notice that his services are not required. This would be contingent upon the physician having actually suffered a financial loss by virtue of leaving an opening in his schedule to accommodate the attorney for the court appearance. When a case has been stricken or delayed for some reason unavoidable by the attorneys, there should be no charge made by the physician.

Consultation in Potential Malpractice Case

When a physician is requested to provide a consultation in a case having a possible potential malpractice implication, he should at all times be cooperative. An attempt should be made to have the requesting attorney invite the doctor involved or his attorney to be present. If this is not at all agreeable to the requesting at-

torney, then the consultation of an informal type should be provided. The doctor should freely and clearly present the objective findings made by him in the case but should carefully avoid expressing any legal opinion since there may well be mitigating or extenuating circumstances of which he is not aware. At the time of such consultation, an effort should be made for the patient's attorney to meet with the treating physician for conference.

The physician presently treating a patient-client involved in a possible malpractice situation should reveal all information in his possession which might pave the way towards an amicable disposition of a claim or potential claim and prevent the filing of a suit against the prior treating physician. Cooperation of this nature can forestall the filing of suit for the purpose of obtaining medical information when it cannot be gained otherwise from the last treating physician.

Joint Medical-Legal Committee

The bar and medical associations of the State of Oklahoma shall each appoint ten members from their membership, who shall jointly constitute the committee. The committee should meet as often as circumstances warrant at the call of its co-chairmen, one attorney and one physician. The minutes of each meeting should be kept and an annual report be made to each profession at its annual meeting.

The primary purpose of the committee will be to supervise the implementation of the medical-legal interprofessional code. In addition they shall diligently work for a better and improved relationship between the medical and legal professions; work with the courts to improve the administration of justice; cooperate to the end that all litigants will have their day in court, unhampered by financial status, race, creed or religion; promulgate such procedures or suggestions as found necessary to make effective the objectives of the committee; report annually to each profession the work of the committee with any recommendations for improvement; and consider inquiries or written complaints from either profession regarding the other.

In this last regard, where any written and signed complaint is made by a member of either profession and where medical testimony or reports

are of a wide variance, enough to raise the question of bias, prejudice, incompetence, perjury, or ignorance, this will, if thought necessary, be presented to the committee of the whole for proper evaluation and disposition. The committee will attempt to answer any such complaints or harmonize the parties and, where circumstances justify, refer same with or without recommendation to the grievance or other appropriate committee or bodies of one or both professions for consideration.

SECTION III

Recommendations:

1. It is recommended that the Council on Professional and Interventional Relations continue its liaison efforts with other professional and vocational organizations.

2. It is recommended that the Council continue its efforts at liaison with the Oklahoma Osteopathic Association. The Council should be free to enter into open discussion on any and all problems or areas of concern of either association. Any decision on possible policy changes will, of course, be taken to the OSMA Board of Trustees and/or House of Delegates.

3. It is recommended that the Council continue its efforts to establish liaison with the Claimsmen's Association in order to establish a guideline, policy statement or working code for relationships between physicians and claimsmen.

4. It is recommended that the OSMA House of Delegates officially adopt, as written, the Interprofessional Code to guide relations between physicians and attorneys. It is further recommended that the code be printed in pamphlet form and distributed to all members of the association.

Report of the MEDICAL CENTER LIAISON COMMITTEE APPROVED

Committee Members

Harold W. Calhoon, MD, Tulsa,
Chairman

Leonard P. Eliel, MD, Oklahoma City
James R. Taylor, MD, Bartlesville
G. Rainey Williams, MD, Oklahoma City

C. Rilev Strong, MD, El Reno
Oliver Patterson, MD, Sapulpa
Wendell L. Smith, MD, Tulsa
Robert S. Ellis, MD, Oklahoma City

M. Boyd Shook, MD, Oklahoma City
Billy Dale Dotter, MD, Okeene
Robert E. Engles, MD, Durant

SECTION I

MEDICAL STUDENT LIAISON

During the past several months your committee has actively sought summer employment for freshmen and sophomore medical students at the O.U. Medical School. This has become an almost yearly function of your committee.

Most physicians in the state were queried as to whether or not they would like to hire a medical student to work with them during the summer. In addition, a number of state hospitals had expressed interest in the project.

At the time this report is being written, nearly 50 positions have been secured. While your committee was soliciting information on job opportunities, the medical students were conducting their own survey of the student body to determine who needed summer employment and where they would like to work. As employment opportunities become available the students are matched with the jobs and instructed to contact the physician directly. The final determination of employment was to be made jointly by the physician and the student . . . either having the prerogative of refusing.

SECTION II

RESOLUTION No. 12

During the Tulsa Annual Meeting, the OSMA House of Delegates adopted Resolution No. 12, Financial Aid to Medical Students. This resolution directed the state medical association to "sponsor a yearly, voluntary contribution of \$10 from each of its members." The funds thus collected were to be delivered "unencumbered and unrestricted" to the associate dean of student affairs of the O.U. Medical Center to be used for the benefit of those students in need.

As of the first of May a total of \$3,575 had been received.

The medical school asked, and received permission, to use the funds to seek matching federal monies for student aid. This resulted in association members' contributions being multiplied to a total of nearly \$40,000. This money will be used by the dean on a contingency fee basis to help those medical students who do not have adequate financial support and for those who find themselves in sudden financial difficulty.

SECTION III

RESOLUTION No. 7 and MEDICAL SCHOOL ADMISSIONS

During the last House of Delegates meeting your committee reported that it had concerned itself with the admissions policies and procedures being used by the O.U. Medical School. It pointed out that some criticism had been made that perhaps the medical school was tending to recruit students that were academically inclined, over those that might be more inclined to go into private practice. This concern was apparently widespread and the number of recommendations and the one resolution were adopted by the House in response.

Resolution No. 7, "O.U. Medical School Admissions Committee" pointed out that senior medical students were serving as full members of the O.U. Medical School Committee, and that of the committee's 26 members, nine were senior medical students, nine full time faculty members, and only eight were parttime faculty members in private practice. The resolution also stated that fourth year medical students did not have practice experience and therefore did not have the background to make a value judgement about another student's potential to become a physician. It ended with two resolves . . . that the House of Delegates recommend that medical students be allowed to serve in an advisory capacity only on the Committee on Admissions and that nine representatives of the OSMA be added to the Admissions Committee as presently constituted.

In this latter regard, the OSMA offered to submit a slate of nominees for positions. The nominees would be selected by the OSMA Board of Trustees and had to "pledge to serve actively on the committee" before their name was officially submitted.

After the last House of Delegates meeting your committee actively sought a meeting with the Medical School Administration. At that meeting Resolution No. 7 and the recommendations of your committee were discussed.

Just prior to that meeting Doctor Leonard P. Eliel, had been named to head the University of Oklahoma Medical Center. He had been serving "temporarily" in that position for some time.

During a discussion of the implementation of Resolution No. 7, your

regard to race, creed, or ability to pay for services received, it is mandatory that all citizens of the State of Oklahoma unite in an effort to find adequate solutions to the budgetary and financial problems facing the University of Oklahoma Health Sciences Center,

NOW THEREFORE BE IT RESOLVED, that Governor Hall be commended and supported for his declaration of intent to maintain Children's Memorial Hospital Inpatient services and maintain Emergency Room Services at the Health Sciences Center, and

BE IT FURTHER RESOLVED, that the Legislature of the State of Oklahoma and its citizens be encouraged to join the Oklahoma State Medical Association in support of the Health Sciences Center in this crisis in order to maintain the high quality of medical education and medical care that has been carried out in the past.

(Late Resolution)
Resolution No. 17
(DISAPPROVED)

SUBMITTED BY: M. Joe Crosthwait,
MD and Arnold G. Nelson, MD

TITLE: Physician-Patient Relationship

REFERRED TO: Reference Committee No. III

WHEREAS, the physicians of the Oklahoma State Medical Association recognize that the continued encroachment, interference and intimidation by the third parties is resulting in a deterioration of medical care for our patients; and

WHEREAS, it is recognized that it is the responsibility of the physicians to protect and safeguard the medical care of our patients; now

THEREFORE BE IT RESOLVED, that any direct or indirect relationship now existing between any physicians of the Oklahoma State Medical Association and any third party be discontinued and that no direct or indirect relationship or understanding be entered into by a physician of the Oklahoma State Medical Association; and

BE IT FURTHER RESOLVED, that any such direct or indirect relationship or understanding be considered unethical conduct on the part of that physician and be subject to action as provided for in the Constitution and By-Laws of the Oklahoma State Medical Association.

Report of the COUNCIL ON INSURANCE (APPROVED)

Council Members

C. Alton Brown, MD, Oklahoma City,
Chairman

Jack D. Fetzer, MD, Woodward

Robert W. Kahn, MD, Oklahoma City

Donald F. Mauritson, MD, Tulsa

David D. Fried, MD, Hollis

William S. Dandridge, MD, Enid

C. E. Woodard, MD, Tulsa

William G. Bernhardt, MD, Midwest
City

William M. Leebron, MD, Elk City

Warren G. Gwartney, MD, Tulsa

Virgil Ray Forester, MD, Oklahoma
City

SECTION I

Group Term Life Insurance

This program is underwritten by the Massachusetts Mutual Life Insurance Company through the Wilson and Wilson general agency.

The company has offered a group term life insurance program to OSMA members since 1956.

In 1971, a new level group term life insurance program was introduced to replace the decreasing term insurance previously offered. Physicians enrolled in the old program were given the option of retaining the decreasing term coverage if they so desired, but effective April 1, 1971 only the new program has been offered.

The enlarged program provides for \$50,000 of coverage prior to age 60, \$25,000 from age 60 through 64, and \$10,000 from age 65 through 69. Accidental death benefits are included providing additional benefits of \$100,000 prior to age 60 (quadruple indemnity is provided for death on a common carrier). Also, the insured sums are payable in the event of dismemberment or loss of sight, and waiver of premium due to disability is included in the cost.

Since the inception of the plan, total premiums have been received in the amount of \$930,593. Total incurred claims and retention costs during this same period were \$1,005,533.94. In addition, dividends have been returned to the members in the amount of \$9,628.30. As a result, the insurance company has sustained a net loss of \$84,568.31 during a fifteen-year period of operation.

Despite this record, however, Massachusetts Mutual not only continues to offer the coverage but is will-

ing to make innovations to improve it.

At the present time, plans are underway to permit OSMA members to convert the term life insurance to ordinary life insurance. This option will be offered in the near future.

SECTION II

Disability Income Program

The disability income program is underwritten by the Insurance Company of North America and is administered by C. L. Frates and Company.

There are currently about 700 OSMA members insured under the plan. The program allows a physician to select from a number of waiting periods and from a variety of monthly benefit ranges up to \$1,200 per month. It also provides options as to the length of time benefits will be paid for disability due to sickness . . . three years, five years, or to age 65.

Since the inception of the program in 1961, \$1,614,497.80 has been collected in premiums and \$1,016,083.45 has been paid in claims or is reserved for losses. In 1971, paid claims and reserves were approximately \$50,000 less than premiums received, a reversal of 1970 in which the program was unprofitable for the company.

Since 1961 there have been no rate increases in the program which indicates its rather remarkable stability. It is believed that the OSMA Disability Income Program is competitive with other offerings made available to Oklahoma physicians.

SECTION III

Overhead Expense Program

This program is underwritten by the Continental Casualty Insurance Company through C. L. Frates. There are only about 150 members of the association insured under this plan which has been available since 1962.

The program indemnifies physicians against the cost of keeping their offices open during periods of disability due to accident or illness. From \$300 up to \$1,500 a month coverage may be purchased for a disability period lasting 18 months. There are options for waiting periods before benefits begin, either 15 days or 30 days.

Premiums for this program are extremely competitive. Favorable loss experience had enabled the Council on Insurance to lower premiums by 20% since the inception of the pro-

uals can provide valuable help with the ever growing number of interviews, and can provide as well a fresh point of view about applicants."

Recommendation No. 7:

"The committee recommends that a closer liaison be developed under the sponsorship of the administration of the college between pre-medical advisors and the admissions board." Such a liaison would not only enhance the prestige of pre-medical advisors, it would also encourage students at the college and university level to come to know them better. "Qualities which cannot be adequately judged in a brief interview may be apparent to those who know the student over a period of time. Regular personal contact with pre-medical advisors by members of the Admissions Board can provide us with meaningful information about applicants. This can also be a mechanism by which to recognize and recruit talented students and an avenue by which to evaluate pre-medical programs and perhaps provide positive influences."

Recommendation No. 8:

"The committee recommends that the admissions board be restructured to include two component groups: "The first group shall be charged with interviewing and liaison functions with the primary goal of evaluating existing information relative to non-academic parameters and obtaining additional information as to personality characteristics, thereby completing the application.

"The second group shall be charged with review and evaluation of all accumulated data, academic and non-academic and with the final identification of those applicants to whom an offer of admission will be tendered."

According to Dean Bird the importance of this separation of function cannot be overstated. The second group will have not been "contaminated" by exposure to the individual's personality, except through the buffer of the first group, and will be free to make a more unbiased and equitable decision.

Recommendation No. 9:

"The committee recommends: "A. That the rules regarding admission with advanced standing be examined for change to allow more flexibility, and

"B. That guidelines for advanced placement of candidates be developed promptly." This would allow the opening of medical school classes to applicants "who have had professional education and experience in disciplines allied to medicine, such as bio-medical sciences and in other graduate health professional schools. The college may now offer such students no alternative but to complete standard pre-medical requirements and no mechanism by which to accelerate in the medical curriculum, utilizing previously acquired education."

Recommendation No. 10:

"The committee recommends: "A. That the same standards for admission be granted to women as to men.

"B. That the college take positive steps toward making medical education more available for women through consideration of their special needs."

Recommendation No. 11:

"The committee recommends that this college develop a program of identification and encouragement of promising and interested minority students, including sufficient guidance and counseling at the pre-medical level, so that such students can enter the college without the need for dual standards of admission and without serious academic handicaps."

According to Dean Bird all of the above listed recommendations will be implemented as soon as possible. In addition, the OSMA will be asked to submit a list of nominees to serve on the interviewing team. He states that the requirement that such interviewers will attend workshops will be strictly enforced, therefore any such nominees would have to pledge not only to attend the interviews, but also the workshops.

SECTION IV

TULSA MEDICAL SCHOOL

During the last session, the Oklahoma Legislature adopted a proposal to create a two year clinical medical school in the Tulsa area. The legislation was based on a report issued by Booz, Allen, and Hamilton, a management consultant firm. The report had been commissioned the year before by the Oklahoma Legislative Council. (This particular legislation is covered in other reports issued to this House of Delegates.)

During the time the Legislature was considering the enabling legisla-

tion your committee contacted all members of the Oklahoma House of Representatives and stated that the creation of such a medical school in the Tulsa area could be a "unique school dedicated to innovation in the education of physicians for Oklahoma." We went on to pledge that our committee would work with the administration of the new medical school to help it meet its objectives.

Immediately after the legislation was adopted, your committee wrote Leonard P. Eliel, MD, President of the O.U. Medical Center as follows:

"Now that the possibility of a medical school in the Tulsa area has become a reality, it offers the medical profession an opportunity to promulgate innovation in the training of primary care physicians. We must not allow tradition or preconceived ideas to limit the possibilities.

"The Medical Center Liaison Committee of the Oklahoma State Medical Association wishes to urge you to stress the importance of creative innovation to all of the persons selected to organize and administer the Tulsa school. *The political reality is that it must be dedicated to the needs of Oklahoma, and our state desperately needs primary care physicians.*" (emphasis added)

Doctor Eliel responded by letter and stated, "You can be assured that Doctor Bird and I will stress in every possible way the need for the Tulsa programs to be innovative and develop adequate opportunity for the training of physicians in primary care. As I have said many times, I think Tulsa will be "missing the boat" if it does not do so . . ."

The reality of the Tulsa situation is this . . . not only did the legislature adopt an enabling law for a medical school, it also adopted one for a school of osteopathy in the Tulsa area. The D.O.s of the state have already made an application to the Department of Health, Education and Welfare for a \$450,000 per year grant for four years to enable them to start up their school.

In view of the current financial crisis at the O.U. Medical Center, it is interesting to speculate on whether or not the state of Oklahoma can afford two new schools in the Tulsa area. Although federal money is available for planning and construction, actual operating monies must come from state taxes.

In its report to the Legislative

the government accounting office to consider any such finding as sufficient evidence as to justify payment of a charge above the prevailing fee.

The determination of what is a prevailing fee is a statistical problem requiring a system of continuously monitoring what physicians are actually charging. The easiest way to monitor such charges is to be the intermediary that actually pays them. Thus you have a continuous flow of verified data upon which to perform the necessary calculations to arrive at the prevailing fee.

Without some method to assure a continuous flow of certified data and the necessary staff and equipment to perform the mathematical functions, it becomes obvious that it would be impossible for the association to attempt to verify or refute the correctness of a stated prevailing fee. However, here again if the committee was given some type of official status then the information to be found in the computers belonging to Medicare and Medicaid could be made available to the committee for comparison purposes.

(It should be noted that during the September 23rd meeting with Mr. Rader the committee was told that both Medicaid and Medicare now use the same information regarding profiles and prevailing fees.)

At this point it becomes obvious that the only way the peer review committee will ever have the complete cooperation of any governmental health program is through congressional action. The OSMA Foundation for Peer Review was established last December in anticipation of this very type of legislation. This particular activity of the association is covered more thoroughly in other reports presented to this House of Delegates. Perhaps this is where the final answer to resolution No. 13 lies.

Resolution No. 6

(DISAPPROVED)

SUBMITTED BY: Logan County Medical Society

TITLE: Limitation of Peer Review

REFERRED TO: Reference Committee No. III

WHEREAS, the traditional function of peer review in medicine has been to limit experimental scientific theories and untried treatments, and

WHEREAS, political exigencies have led to Congressional pressure to subvert peer review methods into

a monetary price control machinery, therefore

BE IT RESOLVED that the Oklahoma State Medical Association now re-affirms the traditional concept that peer review shall be confined to advisory declarations and educational efforts that do not compromise or modify the physician's contractual rights with his patient or employer, and

BE IT FURTHER RESOLVED that the Oklahoma State Medical Association shall take what action necessary to transform the Foundation for Peer Review to also be limited to advisory declarations and educational efforts that do not compromise or modify the physician's contractual rights with his patient or employer, and

BE IT FURTHER RESOLVED that the Oklahoma State Medical Association inform the Oklahoma Congressional delegation of the Association's intention to limit peer review to this concept.

Resolution No. 7

(DISAPPROVED)

SUBMITTED BY: Kingfisher County Medical Society

TITLE: Limitation of Peer Review

REFERRED TO: Reference Committee No. III

WHEREAS, the traditional function of peer review in medicine has been to limit experimental scientific theories and untried treatments, and

WHEREAS, the political exigencies have led to congressional pressure to subvert peer review methods into a monetary price control machinery, therefore

BE IT RESOLVED that the Oklahoma State Medical Association now re-affirms the traditional concept that peer review shall be confined to advisory declarations and educational efforts that do not compromise or modify the physician's contractual rights with his patient or employer, and

BE IT FURTHER RESOLVED that the Oklahoma State Medical Association inform the Oklahoma Congressional delegation of the Association's intention to limit peer review to this concept.

Resolution No. 8

APPROVED AS AMENDED

SUBMITTED BY: Logan County Medical Society

TITLE: Encouragement of sound patient-physician contract

REFERRED TO: Reference Committee No. III

WHEREAS, the current inflationary economic climate has produced a multiplicity of third party agencies paying health benefits for patients, and

WHEREAS, there is a maze of regulations from these agencies that are intended for administrative convenience rather than medical effectiveness, and

WHEREAS, the end result of these various administrative devices alienates the patient from his physician and the physician from quality medical performance, therefore

BE IT RESOLVED that the Oklahoma State Medical Association re-affirm its previous policy of urging all physicians in Oklahoma to refuse assignment from third party payors, and to negotiate direct, personal contracts with patients that will properly serve their medical needs, and

BE IT FURTHER RESOLVED that the Oklahoma State Medical Association will give moral support and encouragement to those of its members who might be harassed as a result of refusing assignments.

Resolution No. 9

(APPROVED)

SUBMITTED BY: Kingfisher County Medical Society

TITLE: Encouragement of sound patient-physician contract

REFERRED TO: Reference Committee No. III

WHEREAS, the current inflationary economic climate has produced a multiplicity of third party agencies paying health benefits for patients, and

WHEREAS, there is a maze of regulations from these agencies that are intended for administrative convenience rather than medical effectiveness, and

WHEREAS, the end result of these various administrative devices alienates the patient from his physician and the physician from quality medical performance, therefore

BE IT RESOLVED that the Oklahoma State Medical Association strongly urge all physicians in Oklahoma to refuse all future assignments to third party payors, and to negotiate a direct, personal contract with the patient that will properly serve the patient's medical needs, and

BE IT FURTHER RESOLVED that the Oklahoma State Medical Association

to work out a solution to this problem and if at the end of the three month period this solution has not been found, the committee is directed to take this grievance to the Bureau of Health Insurance and our representatives in Congress in an effort to find a method to gain reasonable cooperation from the Department of Public Welfare."

After the 1971 Annual Meeting President Lucien M. Pascucci, MD, named a committee to implement Resolution No. 13. The committee members are set out above. A meeting was sought with L. E. Rader, Director of the Department of Institutions, Social and Rehabilitative Services. That meeting was held Thursday afternoon, September 23rd, in Mr. Rader's offices.

A number of different aspects of the problem were discussed during the meeting. The committee knew, and Mr. Rader's staff reiterated that the DISRS was bound by federal regulations to pay no more than the prevailing fee in the area for any given medical service. They could exceed the prevailing only if there were unusual circumstances involved.

As stated in the report of the Insurance Review Committee, DISRS is under no obligation to use the OSMA Insurance Review Committee at all. There is no proviso in federal regulations that such a committee, or its recommendations, are to be honored by a carrier. The use of the committee is out of courtesy to the profession and concern for the patient's welfare.

After much discussion the question to be answered boiled down to this: "If the OSMA Medical Insurance Review Committee recommends that the physician involved in any given case be paid a fee higher than the prevailing fee, is this recommendation sufficient evidence for DISRS to justify the higher fee payment to the government accounting bureau auditors?"

Mr. Rader instructed his attorney to forward this question to the HEW legal department for answer.

In order to establish a better liaison between the Department and the Insurance Review Committee, Mr. Rader invited Doctor Howard Keith to become a member of his medical advisory committee.

After some delay the question, as

outlined above, was submitted to HEW. DISRS received a letter dated January 25 from Mrs. Martha A. McSteen, Regional Representative, Department of HEW, Dallas, Texas. After stating briefly part of the Medicare/Medicaid law, then quoting regulations regarding "charges higher than customary prevailing charges" Mrs. McSteen ended her letter by saying, "... in the situation described in your letter, where the physician performed *no unusual services*, it does not lie within the purview of the Bureau of Health Insurance, DISRS, or the Peer Review (Insurance Review) Committee to recommend, allow, or pay, a higher amount. This would be contrary to the law and is not subject to administrative fiat."

In pertinent part the quoted regulation stated, "a charge which exceeds either the customary charge of the physician ... or the prevailing charge in the locality ... may be found to be reasonable ... only where there are unusual circumstances, or medical complications requiring additional time, effort or expense, which support an additional charge, and only if it is acceptable medical or medical service practice in the locality to make an extra charge in such cases. On the other hand, the mere fact that the physician's ... customary charge is higher than prevailing would not justify ..." paying more than the prevailing fee.

It should be noted that Mrs. McSteen limited her answer only to those situations where "no unusual services" were performed. In response to this letter Committee Chairman Howard Keith wrote directly to Mrs. McSteen and asked, "If, at the request of either DISRS or the physician, our insurance review committee finds that there were unusual services performed, may DISRS pay a higher fee, as recommended by our committee? Further, will our committee's decision letter be sufficient evidence for DISRS to justify the higher than usual fee to the federal auditors?"

By letter dated March 14 Mrs. McSteen responded, "... once the peer review committee has rendered its medical findings, it is the carrier's responsibility, under Section 1842 of the Social Security Act, to make the fiscal determination, i.e., as to reasonable charge. Ordinarily,

when a peer review committee finds that medically unusual circumstances exist in a given case, it follows that a higher charge also may be considered the reasonable charge. But again, *it is the carrier's responsibility to consider the committee's recommendations and determine a reasonable charge for the service.*" (emphasis added)

"With regard to your second question, the peer review committee's recommendation letter suffices as evidence that medically unusual circumstances were found to exist in a particular case. *The recommendation letter will not suffice as evidence why a given fee was paid. The recommendation letter, with documentation and rationale by the carrier, based on the carrier's reasonable charge experience for the area, will suffice as evidence why a given charge higher than customary or prevailing was paid.* Both the recommendation letter and the carrier's documentation are required because these situations involve the committee's medical determination on the one hand (recommendation letter) and the carrier's fiscal determination (reasonable charge rationale) on the other." (emphasis added)

As can be seen, unless the Insurance Review Committee can document that the situation was more than usual, DISRS is bound to pay no more than the prevailing fee. Since the OSMA does not have available to it the statistical wherewithal to determine what is the prevailing fee in any given area, it must be presumed that the cut DISRS is making in physician's fees is simply to lower them to the prevailing fee for the area.

From the foregoing it is obvious that your committee has fulfilled almost all of the functions spelled out in Resolution No. 13. However, we have not taken the situation to our representatives in Congress. This would be the next logical step.

The difficulty revolves around the fact that the Medical Insurance Review Committee has no "official" capacity in the federal law or regulation. Any approach taken, therefore, should be to remove the committee's impotence by giving it recognition and authority through proper channels. This would allow DISRS to honor a decision of the committee that a case was, in fact, unusual. Such official status would obligate

Council the Booz, Allen, and Hamilton Management Consultant Firm stated, "The establishment of a new four year school of medicine in Oklahoma would provide additional physicians, providing the graduates could be retained in the state . . . *this approach is not feasible at this point in time for the following reasons:* The capital costs required for development of a new medical school vary significantly depending on factors such as shared facilities, size of entering class and emphasis of programs. In any case, the capital requirements are substantial. . . . The minimum operating costs for a four-year medical school were reported to be \$3.5 million in 1969-70. The average cost was \$17.4 million for the same time period. The magnitude of these costs would create a financial burden on the state of Oklahoma and would require significant shifts in priorities if the school were to receive adequate financial support. Graduates of a new four year medical school would *not be added to the available physician manpower in the state for eight to ten years.*" . . . (due to training time).

In support of the two year clinical school in the Tulsa area the report states, "The supply of physicians in Oklahoma could be increased substantially at a modest cost by developing a two year, 'clinical' school of medicine in Tulsa. The new school should be affiliated with the University of Oklahoma and should provide for the clinical years of undergraduate medical education, or the last two years of a four year medical education program. The first two, or the basic science, years should be obtained primarily at the University of Oklahoma College of Medicine at Oklahoma City. . . . Benefits of this approach include the following: *The entering class to the University of Oklahoma College of Medicine could be increased immediately for the basic science experience.* By the time the entering students require clinical experience, the medical school at Tulsa would be operational. With this approach, *there would be no time lost in the increased enrollment of medical students.* . . . Minimal capital costs would be incurred initially and only modest capital expenditures would be required later as compared to a four-year school . . . *the emphasis at the Tulsa School of Medicine could be toward the clinical practice of*

medicine rather than toward research or academic medicine." (emphasis added.)

The report states that a two-year clinical medical school in Tulsa is estimated to cost approximately \$1 million per year to train approximately 100 students in the third and fourth years of medical school.

The enrollment of "100 students" would be a goal to reach in several years. Initially the entering class would be enlarged by 25 to 50 students for the basic science years. Two years later this number of students would go to Tulsa to start their two year clinical training. Each entering class thereafter could be enlarged slightly up to the goal of 100 "new" medical students.

In several different places the report from Booz, Allen and Hamilton stated, "The development of a four year medical school is not feasible at this time." In spite of this repeated, and well documented conclusion, the legislature chose to authorize the creation of two schools for the Tulsa area. While the Booz, Allen and Hamilton report is a "feasibility study" in its truest form, the report justifying the creation of a school of osteopathy in Tulsa is more of a "game plan" for the creation of such a school. It does not deal directly with the feasibility of a four year school, at all, and never refutes the statement made by Booz, Allen and Hamilton in their latest report, or in the report made by the same firm in January, 1969.

Recommendations:

1. It is recommended that the House of Delegates commend the medical school administration for its foresight in ordering the "Report on Admission Policies and Processes of the University of Oklahoma College of Medicine."

2. It is recommended that the House of Delegates endorse the changes in admission policy as outlined in the aforementioned report.

3. It is recommended that the OSMA, through its Board of Trustees, officially request the O.U. College of Medicine to change its bylaws to provide that at least 50% of the appointments to its Admissions Board be composed of primary care physicians in private practice.

4. It is again recommended that the OSMA offer to submit a slate of nominees for positions on the Board of Admissions. The nominees would

be selected by the OSMA Board of Trustees and must pledge to serve actively on the Board before their name is officially submitted.

5. It is recommended that the House of Delegates urge the Medical School Administration to dedicate the two year medical school in Tulsa to the clinical training of primary care physicians, and further, that they actively seek new and innovative techniques to accelerate and expand such training.

6. It is recommended that the school of medicine be urged to re-evaluate, and if necessary reorganize, its family practice residency program to make it more responsive to the needs of Oklahoma communities.

Report of the RESOLUTION No. 13 COMMITTEE (APPROVED)

Committee Members

Howard B. Keith, MD, Shattuck, Chairman

Robert J. Hogue, Jr., MD, Guthrie
Scott Hendren, MD, Oklahoma City
Jack L. Richardson, MD, Tulsa
George N. Beckloff, MD, Stratford
Homer D. Hardy, Jr., MD, Tulsa
Alfred H. Bungardt, MD, Tulsa

During the last annual meeting of the OSMA House of Delegates held on May 1 in Tulsa, resolution No. 13 was adopted. Entitled "Relations With the Department of Public Welfare" the resolution read as follows:

"WHEREAS, the 1970 House of Delegates of the Oklahoma State Medical Association unanimously passed a resolution requesting the President of our Association to contact the Governor of the State of Oklahoma in an effort to obtain a more equitable and cooperative arrangement with the Department of Public Welfare, and

WHEREAS, our President was unable to gain an audience with Governor Bartlett to even make such a request, and

WHEREAS, the Department of Public Welfare continues to flagrantly refuse to cooperate with the Oklahoma State Medical Association Medical Insurance Review Committee and abide by its decisions, and

WHEREAS, the Department of Public Welfare continues to reduce physician's fees without rhyme or reason,

NOW, THEREFORE, BE IT RESOLVED, that the President of the OSMA designate a committee to try

tion will give moral support and encouragement to those of its members who might be harassed as a result of refusing assignments.

(Late Resolution)

Resolution No. 12

(APPROVED)

SUBMITTED BY: Robert J. Hogue, Jr., MD

TITLE: Direct Billing

REFERRED TO: Reference Committee No. III

WHEREAS, physicians of the State of Oklahoma, as well as the entire United States, are continually harassed and the doctor-patient relationship suffers due to the intervention of third parties, and

WHEREAS, the only reasonable solution for making a last ditch stand against this third party interference is obviously to continue to render the best medical care possible to our patients without regard to their ability to pay but yet to deal directly only with the patient regarding financial arrangements for their care, and

WHEREAS, the Kingfisher County Medical Society has, in the interest of protecting the freedom of the private practice of medicine as well as the freedom of their patients to deal directly with their physician, taken this stand of refusing to deal with any third party by taking assignment for remuneration for services rendered and announced it publicly, therefore

BE IT RESOLVED that the Oklahoma State Medical Association hereby gives the Kingfisher County Medical Society physicians their highest vote of commendation for this action, and

BE IT FURTHER RESOLVED that the Oklahoma State Medical Association officially take the same stand; encouraging all of its members and contingent county medical societies to officially and publicly take this stand, and

BE IT FURTHER RESOLVED that the Oklahoma State Medical Association Delegation to the American Medical Association draw up an appropriate resolution to introduce into the American Medical Association House of Delegates encouraging all physicians in the United States to take this stand to maintain freedom of the private practice of medicine and the traditional doctor-patient relationship.

(Late Resolution)

Resolution No. 14

(APPROVED AS AMENDED)

SUBMITTED BY: M. Joe Crosthwait, MD, and Arnold G. Nelson, MD

TITLE: Physician-Patient Relationship

REFERRED TO: Reference Committee No. III

WHEREAS, the physicians of the Oklahoma State Medical Association, in association with many other physicians over the country, have for many years developed, supported, and cooperated with Prepaid Health Care Programs, and

WHEREAS, the physicians of this State and Country have recognized their duty to support and cooperate with any program that will increase the quality of care and provide more and better care for their patients, and

WHEREAS, the physicians of this State and Country do also recognize their duty to resist and oppose any program or programs that in their medical judgment will either now or in the future result in less and poorer care for their patients, also resulting in loss of historical and traditional doctor-patient relationship, and

WHEREAS, we as physicians now recognize that many of our efforts to cooperate and develop programs in the best interest of the patients have in fact resulted in a beginning of deterioration in the quality of care for our patients, resulting in regulations and controls making it virtually impossible to continue to protect the patient, and

WHEREAS, the beginning of the deterioration in quality of care coincides with the entry of the 3rd party in between the doctor and the patient, and

WHEREAS, this has resulted in the development of controls in which unskilled agents of third parties, indeed in many instances, file clerks, making medical decisions for our patients superceding in some instances the decisions of the physician and certainly interfering with the unencumbered decision of the physician, and

WHEREAS, we as physicians now recognize that in order to preserve the quality of care that the physicians of this country have developed for their patients, certain basic decisions must now be made to protect this quality of care, and

NOW THEREFORE BE IT RESOLVED, that the physicians of the

state be encouraged at once to notify their patients that all relationship between physicians and third parties will cease except for the State Medical Care Program of the State Welfare Department; that a basic contractual agreement exists between the patient and his physician, the physician being responsible to the patient, the patient being responsible to the physician, and that in the patients' best interest no third party must be allowed to come between a patient and his doctor and no direct relationship between a physician and any third party will be recognized, and

BE IT FURTHER RESOLVED, the physicians of this State and this Country in association with each other continue to develop Peer Review mechanisms that will protect the quality of medical care rendered to our patients and further protect the physicians from encroachment or intimidation by any third party, and

BE IT FURTHER RESOLVED, the Oklahoma Delegates to the AMA be instructed to introduce the Resolution to the AMA House of Delegates in the usual and proper manner.

(Late Resolution)

Resolution No. 16

(APPROVED AS AMENDED)

SUBMITTED BY: Board of Directors, Oklahoma County Medical Society

TITLE: The Budgetary Crises at the University of Oklahoma Health Sciences Center

REFERRED TO: Reference Committee No. III

WHEREAS, the appropriations for the University of Oklahoma Health Sciences Center for the fiscal year 1972-73 are over two million dollars short of funds needed to sustain various programs at the Health Sciences Center; and

WHEREAS, a large portion of the facilities and programs created at the Center since 1963 have been the direct result of mandates from the citizens of Oklahoma and the State Legislature; and

WHEREAS, the University of Oklahoma Health Sciences Center is striving to train more health manpower and ease critical health manpower shortages throughout the State; and

WHEREAS, traditionally the University Hospitals have provided health care to Oklahomans without

committee was told that any attempt to remove medical students from the admissions committee of the medical school would result in an adverse reaction by the student body. However, the administration pointed out that they would not object to the dilution of the student strength and importance by increasing the size of the committee.

During the discussion Dean Robert Bird asked that the committee delay consideration of Resolution No. 7 until a "new study of the admissions procedure of the medical school" had been published.

The report had been commissioned by the dean on February 23rd, 1971, and was conducted by an ad hoc committee of the Admissions Board during the year 1971. It was finally completed and published on January 16th of this year.

According to Dean Bird the report has now been adopted by the faculty board and will be submitted to the Board of Higher Regents. It is anticipated that most of the recommendations being made will be implemented this summer.

The recommendations, with appropriate comments, are listed below.

In the introduction to the report it states, "According to the bylaws of the College of Medicine, 'the admissions board is appointed by the Regents of the University of Oklahoma on recommendation of the Dean of the School of Medicine with the advice of the Associate Dean of Student Affairs. *Its composition shall be specified by the faculty board.* The faculty members shall be selected from among those receiving the greatest number of votes by the faculty of the School of Medicine from a list of all faculty members who have indicated a willingness and desire to serve on the Admissions Board. The medical student members shall be selected from among those receiving the greatest number of votes by the senior class from a list submitted to the Dean from the Student Council.'"

It goes on to state that the Admissions Board is presently composed of 18 faculty and nine student members and that the "Board establishes its own mode of operation each year." (emphasis added)

The report states, "The goal of the admissions process in the 1970s can no longer be simply stated as choosing the applicant who is most likely

to succeed in medical school or in medical practice, if indeed the latter can be defined. *Rather than this, the admissions process needs to take cognizance of the crisis in distribution of health care in our country,* and to provide for broad representation in our medical school of all population sub-groups: urban and rural, male and female, black and white. While there is no guarantee that a broader representation of all groups in our student body will ultimately result in a more equitable distribution of health care, there is the hope that it will do so. The fact that 85% of black physicians serve primarily black patients and that *among general practitioners approximately 60% returned to practice in areas where they grew up,* is evidence that this hope is justified." (emphasis added)
Recommendation No. 1:

"... the committee recommends that this college continue to require 90 semester units and to recommend a bachelor degree." Specific courses in chemistry, physics, biology, English and the social sciences were then recommended for pre-medical students.

Recommendation No. 2:

"... the committee recommends that this college maintain the minimum grade point average standards as they currently exist."

Recommendation No. 3:

"The committee recommends that this college continue to require MCAT (Medical College Admissions Test) scores, without establishing specific minimum scores for qualification for admission." Studies generally indicated that students receiving MCAT scores over 500 tended to complete school while those under 500 tended to make lower grades with approximately 40% of those scoring 450 or less in the lower 1/3 of their class.

Recommendation No. 4:

"The committee recommends that the present age limit be maintained but with flexibility permitted at the discretion of the Admissions Board." At present admission is limited to students age 30 years or under.

Recommendation No. 5:

"... the committee recommends that the college be encouraged to conduct a formal study of the possible uses of psychological testing in the admission process." In the dictum accompanying the recommendation

the committee stated, "however, our consultants inform us that such tests are not yet available. Nor do we have tests which can accurately identify those personality types which medicine can best do without, such as sociopaths. Consequently, the routine use of psychological testing was not considered a feasible admission tool at this time."

Recommendation No. 6:

"... the committee recommends:

"A. That the college continue to use interviewing specifically for the purpose of eliciting information relevant to the personality characteristics of the applicant.

"B. That the size of the interviewing team be increased.

"C. That the college develop a process by which all interviewers will participate in recurring workshops which will have as their goals improving orientation, improving interviewing techniques and refining the information to be sought."

Dean Bird considers this to be one of the most important recommendations of the committee. The report states, "At the present time our interviewers undertake their task with their own conceptions of what qualities are desirable in an applicant and their own techniques of eliciting information. The value of the interviews can be enhanced by efforts at standardizing the procedure. . . . The scoring system needs to be thoroughly understood so that new interviewers do not inadvertently assign a score with an effect which they did not intend. Review and practice with basic interviewing skills need to be provided through such modalities as audio-visual techniques and group discussions. The topics to be explored in the interviews need to be more specifically defined . . . We urge that the primary focus of the interview be directed toward assessing the diverse personality characteristics of the applicant. It is realized that a skilled interpretation of the responses of the applicant requires that the interviewer have a summary knowledge of the socio-economic and academic background of the applicant.

"Members of the Oklahoma State Medical Association have expressed their desire to have input into the process of choosing their future colleagues. There are also many faculty members who would like to contribute to the process. Such individ-

gram. However, April 1, 1971 through December 31, 1971 wasn't too good for the company. They collected \$4,-767.46 and paid out \$5,316.64. Since the program's inception, it has been extremely profitable for the company.

The premiums are tax deductible as a business expense.

SECTION IV

Excess Limits Liability Program

As a companion to the association's basic malpractice program, the OSMA has endorsed the Insurance Company of North America's "XIC" policy for those physicians who wish to carry their protection to very high limits of coverage.

This coverage requires basic malpractice protection of \$100,000/\$300,000 after which the XIC program will extend the protection to as high as \$1,000,000. The XIC plan also provides excess limits protection on home owners, auto, farmers personal liability, watercraft, aircraft, etc. (subject to having required basic liability protection for each peril).

XIC is recommended by the Council on Insurance as an economical way to achieve adequate protection during this period of excessively high damage suit awards. However, XIC is not mandatory with respect to the association's basic malpractice plan . . . a physician may elect to purchase his entire protection to high limits under the basic program.

Over 300 OSMA members are participating in XIC. 1971 premiums were \$60,500. There have been no losses in the program.

SECTION V

Professional Liability Program

Although the association's professional liability program ranks as one of the nation's finest, it is having the same difficulties as programs nationwide . . . i.e., the amount of claims being paid or reserved is beginning to exceed the premium income. The program in Oklahoma is underwritten by the Pacific Employer's Indemnity Company, a subsidiary of the Insurance Company of North America.

At a time when other state medical associations are having difficulty in finding coverage for their members at any price, the OSMA plan offers a broad coverage with a strong company. Even though they find it neces-

sary to seek premium increase, Oklahoma physicians are paying premiums approximately one-half the rates being charged by other companies.

The program underwent a rate increase approximately 5 years ago, but losses have continued to climb slowly.

To minimize the losses, your Council on Insurance has carried out a claims prevention program by conducting educational courses on medical-legal matters and making available a very informative professional liability booklet to all members of the OSMA. Copies have been distributed statewide and are still available through the association office.

Cooperation between the association and the insurance company is of a unique type. It features a contract whereby the company is required to advise the association of all claims and reserves, thus making it possible at all times for the Council on Insurance to monitor the performance of the plan and to protect the members against unwarranted premium increases. To protect against lost policies, the contract also provides the company must periodically report to the OSMA names of all insured physicians, the amounts of their coverage and the policy numbers.

During the past year, your council has continued to negotiate with the company through the C. L. Frates Company. Earlier this year the company proposed a rate increase of approximately 30%. This amount had been projected by their actuaries as the minimum they would need to continue operating the program properly.

In our behalf, the Frates Company countered this proposal with information developed in Oklahoma and succeeded in convincing the company that they should reduce their rate increase to approximately 21.7% overall. This 9% savings that was achieved is worth approximately \$71,000 a year to Oklahoma physicians. The rate increase will produce an additional premium of approximately \$149,000 based on the present participation in the program.

The Frates Company projects that the rate increase should hold for at least two years using the current trends in loss experience.

Even with the rate increase, Okla-

homa physicians will still be paying only about 50% of the manual rate in most classifications. As an example, at the new rate, class I physicians will be paying \$169 for their \$100,000/\$300,000 professional liability coverage. Other Oklahoma physicians purchasing their coverage from other companies can expect to pay as high as \$296. In Colorado, the coverage costs \$377, \$266 in Arkansas, \$170 in Kansas, \$191 in Missouri, and \$179 in Texas.

For Class III physicians, the new rate will be \$590 for \$100,000/\$300,000 in coverage. Colorado doctors pay nearly \$1,500, Arkansas pays \$1,009, \$646 is the rate in Kansas, \$726 in Missouri and \$680 in Texas.

The attached "state comparison professional liability premiums" fully justifies your council's opinion that Oklahoma's professional liability program is one to be envied by other states.

Your Council is continuing its negotiation with the company to devise other methods of lowering premium rates or offsetting premium increases.

Your Council asked the Frates Company to negotiate with the professional liability carrier regarding the abandonment of the 20% surcharge on partnerships and corporations. After discussions, Mr. Rod Frates pointed out, "I am not sure this is advisable inasmuch as we might find ourselves at some future date less competitive on physicians who are not in partnerships and some other companies in the marketplace. Furthermore, there is a slight additional exposure (since) in a partnership, a partner's insurance becomes excess if the loss exceeds the limit of one policy. We've never had that large of a loss in Oklahoma, but it is a possibility if not a probability. Therefore, it is appropriate to make some additional charge (for the additional exposure)."

State Comparison Professional Liability Premiums

100/300,000.00		
Class	OSMA	OSMA Projected Rate
I	\$153.00	\$169.00
II	\$269.00	\$297.00
III	\$461.00	\$590.00
IV	\$616.00	\$786.00
V	\$769.00	\$983.00

Class	Oklahoma	California
I	\$ 296.00	\$ 915.00
II	\$ 517.00	\$1,603.00
III	\$1,123.00	\$3,470.00
IV	\$1,497.00	\$4,627.00
V	\$1,871.00	\$5,783.00

Class	Colorado	Arkansas
I	\$ 377.00	\$ 266.00
II	\$ 661.00	\$ 466.00
III	\$1,429.00	\$1,009.00
IV	\$1,905.00	\$1,346.00
V	\$2,381.00	\$1,682.00

Class	Kansas	Missouri
I	\$ 170.00	\$ 191.00
II	\$ 299.00	\$ 335.00
III	\$ 646.00	\$ 726.00
IV	\$ 862.00	\$ 968.00
V	\$1,077.00	\$1,210.00

Class	North Carolina	Texas
I	\$ 105.00	\$ 179.00
II	\$ 182.00	\$ 314.00
III	\$ 397.00	\$ 680.00
IV	\$ 529.00	\$ 907.00
V	\$ 662.00	\$1,134.00

SECTION V
Miscellaneous

During the past year, your council has discussed the possibility of setting up a group medical and hospital insurance program for all members of the OSMA. The C. L. Frates Company and the Wilson-Wilson General Agency have been asked to work together to formulate such a program.

It was recommended that the program might also provide for optional coverage for physician's employees. As of the writing of this annual report, the two companies were still in the process of writing up the specifications for the program so that bids might be gathered.

In January of this year, your Council voted to endorse the health insurance council insurance claim form.

This is a standard claim form recommended by the health insurance council and it has been widely accepted by insurance companies nationally and in Oklahoma.

Report of the
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SECTION I
 INTRODUCTION

More frequently than ever physicians and medicine in general, are being asked for advice on medical aspects of life that are outside the sphere of medical practice. Not only are we expected to keep abreast of our own dynamic area but also we must try and understand those social and economic factors that affect the quality of life. It is apparent that we can not restrict our activities to the delivery of medical care, we must become involved in improving health.

Your Council on Public Health is the recipient of many requests for advice and assistance in improving health.

A. Council Activities

1. MAST — Military Assistance to Safety and Traffic

The Council has been asked to participate in establishing an emergency transportation system for the acutely ill, utilizing the facilities of the Department of Defence. Initially MAST in Oklahoma will operate from Ft. Sill and will cover a 100 mile radius from that station. Helicopters will transport patients from point-to-point upon orders from a physician. Details on calling the equipment into service, communications and coordination with hospitals are being drafted. Similar programs have proven successful in Colorado, Texas and Utah. The State Health Department and ORMP are coordinators for the project.

2. Emergency Medical Services

The MAST Program is a part of a developing Emergency Medical Services System. The College of Surgeons (Committee on Trauma) (Tulsa) has done an excellent job in this area. They have initiated a training program for ambulance operators, developed a wide area communications plan for hospitals and emergency vehicles and published a directory of Emergency Medical facilities. These projects have been accomplished through cooperative efforts with various organizations.

3. Venereal Disease Projects

One year ago the Oklahoma legislature passed a law that "... any person regardless of age has the capacity to consent to examination and treatment for venereal disease . . .". This legislation, at a time when the incidence of V.D. was climbing at near epidemic proportions, set off a series of campaigns for examination and treatment. There is a new public awareness about V.D. and hopefully the trend in incidence will start down.

4. National Health Service Corps

Last summer the Planning Committee authorized association representatives to discuss with rural physicians the possibility of requesting government doctors to serve in physician shortage areas. Visits were made to Idabel, Hugo, Talihina, Thomas and Sulphur. The essence of the program is that the National Health Service Corps will assign health personnel to areas of need if the local medical community and community leaders make application. The program is complex and plagued with bureaucracy and it is doubtful that it will do much for the long range problems of rural Oklahoma. Several communities have made application, Coalgate, Davenport, Marietta, Laverne, Hominy, and others plan to do so. We expect some assignments to be made in Oklahoma this month.

5. Review of Medical Services in Correctional Institutions

The AMA and the American Bar Association have discussed a plan to join in studying the medical services rendered in correctional institutions. A special committee of your Council reviewed services in Oklahoma several years ago. While such a study would be helpful — correctional institutions will need additional funds

before conditions can be improved significantly. Your Chairman is in close contact with the Board of Corrections on this problem.

6. Alcoholism and Intoxication Treatment

During the last session of the legislature, a proposal was introduced to adopt a Uniform Alcoholism and Intoxication Treatment Act. The bill was very controversial and was not enacted. Representative of one of the Council's committees testified at the hearing, generally in support of the measure. The position adopted by the committee spokesman was that "alcoholism is a disease or illness and should be treated as such." This conforms to current AMA policy. There was inadequate funding proposed in the bill even though the treatment procedures would have been costly. OSMA members should know that there will be an increasing emphasis on alcoholism and our involvement will be both necessary and essential. Oklahoma has established a treatment program through the Department of Mental Health, if adequate funding is received it will be expanded.

7. Health Education Curriculum

One of the great needs in Oklahoma is the inclusion of a quality health curriculum in Oklahoma's Public School System. Current courses in biology, sciences, physical education and personal hygiene are inadequate to give our children the proper knowledge of, and appreciation for good health. We are now adding to the problem by requiring piecemeal teaching in specific areas — drug education for example. We need a curriculum to train teachers and a curriculum for students on all aspects of health including economics. Representatives of the Council are working with other groups to get such a program started.

8. Miscellaneous

Your Council has provided input at National Conference on Aging, Mental Health and Health Care for the Poor. These subjects are receiving much attention from the administration and it is very likely that the next Congress will pass legislation to provide even more health services to these groups. The Council will keep OSMA Members informed.

B. Summary and Recommendations

The Chairman would like to express his appreciation to the members of the various committees that

compose this council. They have labored diligently and because of their efforts many aspects of medicine, considered public health have been improved.

Recommendations:

1. OSMA Members cooperate in the development of Emergency Medical Services with the College of Surgeons Committee on Trauma (Tulsa), the Oklahoma Department of Health and the Oklahoma Regional Medical Program.

2. The Council be permitted to continue its monitoring of the National Health Service Corps. And cooperate when it is in the best interest of the Public and the medical community.

3. OSMA encourage the implementation of adequately funded programs for the treatment of alcoholism.

4. OSMA encourage the State Board of Education and State Superintendent of Public Instruction to develop a quality health education curriculum for the public school system for grades K through 12.

SECTION II

COMMITTEE ON ALCOHOLISM AND DRUG ABUSE

During the past year your committee on Alcoholism and Drug Abuse has continued to conduct its educational program among association members and the general public.

Numerous speaking engagements have been filled by members of the committee, other members of the association, and OSMA staff personnel on the subject of drug abuse. In addition, the OSMA booklet "Drug Abuse Treatment Manual" was continuously made available to physician members of the association throughout the year and numerous requests for copies were filled.

The manual, published approximately 18 months ago, is an 18 page booklet designed specifically to aid physicians in the proper diagnosis and treatment, on a short term basis, of the drug intoxicated patient. In compliance with a directive from the House of Delegates 1971 meeting, your committee is in the process of updating the manual for possible republication this year.

Through a contribution from the Hoffman - LaRoche Pharmaceutical Laboratories, your committee was able to purchase a 30 minute film entitled "What Did You Take?". The film was prepared in cooperation with the New York Medical Society

and is designed to instruct physicians in the emergency treatment of overdoses of heroin, barbiturates, amphetamines, and LSD.

As soon as the film was purchased, it was immediately made available to all medical societies, hospital staffs, and other medical organizations interested in the care and treatment of the drug abusing patient. As of May 1 the film had been shown to ten different audiences and was completely booked through the month of May and up to June 15th.

The film is for scientific audiences, and is not suitable for showing to the general public. Any organization interested in obtaining the film was urged to contact the OSMA office.

The final report of the 1971 House of Delegates urged your committee to "consider drug abuse programs for elementary and secondary school children." It became quickly evident that there were already so many uncoordinated programs in this area that for the OSMA to launch another would simply add to the confusion. The need is not for more information, but for more coordination. One of the recommendations at the end of this report is your committee's attempt to partially correct the situation.

In August of last year, OSMA President Lucien M. Pascucci, MD, called on all Oklahoma physicians to voluntarily limit their prescribing of amphetamines and methamphetamines and to carefully review their prescribing of other dangerous controlled substances. This plea was made in response to a call from President Nixon for the medical profession to take the lead in stemming the problems of drug abuse.

A statewide information program was immediately launched to inform not only the physicians, but the general public of this attack on drug abuse by the OSMA. After numerous reminders to the profession, pharmacists in Oklahoma were surveyed in order to determine whether or not the program was working.

Of the 195 pharmacists responding to the survey, 159 described dramatic drops in amphetamine prescriptions since September, 1971.

The pharmacists were asked to evaluate the physicians' response by indicating whether or not they had noted a slight, moderate, heavy or no decrease in the prescribing of amphetamines since September 1. The

195 pharmacists responding to the survey were scattered over 61 Oklahoma counties.

One hundred fifty-nine indicated a heavy decrease, 25 indicated a moderate decrease, five showed only a slight decrease while six said there was no decrease in amphetamine prescriptions at all.

Twenty-five of the 32 pharmacists in Oklahoma County responding indicated a heavy decrease in amphetamine prescriptions, four showed a moderate decrease, two a slight decrease, and two indicated no decrease at all. Of the ten Tulsa pharmacists responding, six showed a heavy decrease, two a moderate decrease, and two a slight decrease.

The five Muskogee pharmacists that responded to the survey unanimously agreed that there had been a heavy decrease in amphetamine prescribing. Five pharmacists from Ponca City and three from Enid agreed. The four McAlester pharmacists showed a heavy decrease while one indicated only a moderate decrease, with identical figures coming from Lawton and Altus.

Doctor Pascucci described the results of the survey as "most gratifying." He went on to say, "The medical profession throughout the state is to be congratulated on this effort to police itself. In August when I called on all physicians to voluntarily limit their prescribing of amphetamines and methamphetamines, I pointed out that this could very well be the most important program that the OSMA had ever undertaken. Our members have responded enthusiastically to this assault on the drug abuse problem."

The demand for speakers on the subject of drug abuse for schools, churches, civic groups, etc., has outstripped the supply of "drug abuse experts." In order to help alleviate this situation your committee contacted nearly 50 organizations and offered to assist them in conducting a drug education training program for their members.

The purpose behind the offer was to conserve the time and energy of the true drug experts in the state while reaching the maximum number of people with drug abuse education. The committee offered to "tailor make" a program to fit the requirements of the requesting organization.

The program was to take the form

of a training session to prepare the members of the organization to go out and present programs on drug abuse on their own. The letters making the offer went out in early December of last year and as of May 1 not one organization had requested such a program. A number did respond, however, that they would keep the offer in mind for future use.

Recommendations:

1. It is recommended that the committee be instructed to continue its process of updating the "Drug Abuse Treatment Manual" for possible republication.

2. It is recommended that your committee be instructed to work with other interested organizations in an attempt to coordinate drug abuse information programs throughout the state. In its simplest form this could be no more than the publication of a directory of such programs.

3. Your committee recommends that the House of Delegates urge all Oklahoma physicians to work with their local school boards, educators, police departments, district attorneys, etc., to make available their expertise on the subject of drug abuse. In addition, all physicians should be advised that AMA drug abuse material is available through the OSMA office in Oklahoma City at a slight charge.

4. It is recommended that all county medical societies in Oklahoma be urged to request and use the film "What Did You Take?" as a program sometime during the coming year.

SECTION III DISEASE SCREENING

This committee was established three years ago to coordinate with the State Health Department its chronic disease screening programs. Our current policy provides that the Health Department notify our committee of programs that will be conducted and where. They then notify the County Medical Society of their intentions. Our committee approves these activities and assists in liaison with the county society if necessary. Since organization of the committee, we have had excellent cooperation with the state's physicians and with the Health Department.

There are currently in progress programs screening for Glaucoma, Diabetes, Hypertension, Cervical Cancer, Heart Disease, Obesity, Pulmonary Diseases and Sickle Cell An-

emia. Approximately 30,000 Oklahomans have been screened for these diseases in the past year through the Health Department.

In addition, the committee chairman has been working with various experiments in developing multi-phasic screening operations for the physician's office. While there are obvious benefits to both physician and patients the cost is extremely high for both personnel and equipment. Some large medical laboratories have started sophisticated screening processes with results being rapidly available to the physician and costs reasonable to the patients.

The committee will continue to watch developments in this area of medical care and report to OSMA members.

Recommendations:

1. That the committee's activities be continued.

SECTION IV

IMMUNIZATION COMMITTEE

Your committee maintains a constant surveillance on the immunization levels of epidemiological diseases. Due to excellent cooperation with the Health Department, Oklahoma maintains high immunization levels on most diseases. However, a recent study of pre-school Oklahoma children indicates that almost one-third of that age group do not have adequate polio immunity. The state has a law requiring basic immunizations prior to entry in school and it was anticipated that parents would delay in starting their children on an immunization program. Several outbreaks of polio have occurred in the Southern part of the United States and in Mexico. The committee feels that with the relatively high number of susceptible children in Oklahoma and with potential carriers migrating from the South that we should conduct a statewide campaign this fall. We have contacted sponsoring groups for public support and have received assurance of cooperation. In addition, WKY-TV has agreed to conduct an intensive Public Relations campaign. The committee has set September 10 as the date for the statewide effort. We will need the help of OSMA members.

Immunization levels on other diseases are relatively high; DPT studies indicate 89 percent of pre-school

children have been immunized, 67.9 percent are protected against Rubella, and fifty-seven percent have received Rubella vaccine. These percentages compare very favorably with national averages and in fact are higher in every disease category.

Each year the committee reviews the Health Department's recommended "Schedule for active immunizations and tuberculin testing for normal infants, children and adults." Appropriate changes are made and the schedule is distributed to the state's physicians. At this date the revised schedule is being printed and will be mailed soon.

Recommendations:

1. That the committee's activities be continued.
2. That the House of Delegates approve the statewide polio campaign and urge OSMA members to participate.

**SECTION V
COMMITTEE ON
LABORATORY QUALITY**

For several years this committee has promoted and reviewed a laboratory survey program for Physicians' Office Laboratories.

In 1971, 73 labs were enrolled in a Peer Evaluation Program sponsored by the College of American Pathologists. The program provides each participating lab with four sets of check samples (1 set each quarter) permitting as many as 96 tests. A copy of test results is reviewed by the committee and medically misleading values established.

The results of the 1970-71 program were presented to the Oklahoma Clinical Society last October by the committee chairman and an article based on the Oklahoma experience "Proficiency Testing in the Physician's Office Laboratory — an Ounce of Prevention" will be published in the May issue of the Southern Medical Journal.

A summary of the 1971-72 program has not been compiled however, the committee will provide OSMA Members with details of the review later in the year.

It is obvious from the 3 year results that the performance of Physicians' Office labs is better than believed by many authorities. However, there is still room for improvement. The committee has offered to conduct seminars for participants, but insufficient interest has been shown. The committee is concerned that the

testing program is being construed as quality control. The testing process only points up areas of deficiency and physicians who operate laboratories should insist their personnel review the test results and corrective action be taken when indicated. We will conduct appropriate conferences when and if they are desired by OSMA Members.

Enrollment for the 1972-73 program was completed this Spring. Seventy laboratories are enrolled in the PEP Program and eleven are enrolled in the Basic Survey Program, a more comprehensive survey.

Oklahoma still has the highest percentages of physicians enrolled in laboratory survey programs and they should be congratulated for their participation.

Recommendations:

- The committee's activities be continued.

(Late Resolution)

Resolution No. 10

(APPROVED)

SUBMITTED BY: Pittsburg County Medical Society

TITLE: Standardization of Student Physical Examination

REFERRED TO: Reference Committee No. IV

WHEREAS, there are twenty-six (26) State supported Schools of Higher Education in the State of Oklahoma, all of which require their students to have a physical examination by a physician before admission, and

WHEREAS, every School has its own Student Physical Examination Form requiring information peculiar only to that School, including a marked variation in supporting laboratory procedures which range all the way from none at all at one School to \$25.00 to \$35.00 worth of laboratory and x-ray procedures at other Colleges, and

WHEREAS, this variation of forms makes it impossible for a physician to transfer the information from one form to that from another School in the case of application at more than one School, or of transfer of Schools, which makes for waste of time on the part of the physician, and a ridiculous and unnecessary financial burden on the part of the student, and

WHEREAS, a Standardized Medical Examination Form would lend itself to the transfer of records from one School to another upon request in the same manner as transfer of

transcripts, making for a far better, less expensive and more efficient health record,

NOW BE IT RESOLVED THAT the State Medical Association endorse the adoption of a Standardized Physical Examination Form for students

at all State supported Schools of Higher Education, and request that the Presidents of the various State Colleges and Universities do so, and

BE IT FURTHER RESOLVED that a copy of this Resolution be sent to Doctor E. T. Dunlap, Chancellor

of the Oklahoma State Board of Regents for Higher Education and another to Doctor Edward Vineyard, President of the Presidents Council for Higher Education, Northern Oklahoma State College, Tonkawa, Oklahoma. ☐

Miscellaneous Advertisements

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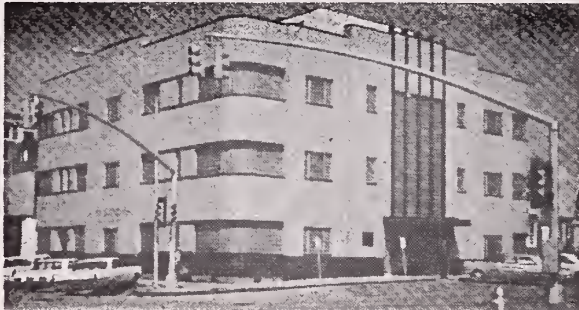
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In life-threatening situations as much as 8 grams/day has been administered intravenously to adults.

In usual IV doses, Lincocin (lincomycin hydrochloride, Upjohn) should be diluted in 250 ml or more of normal saline solution or 5% glucose in water. But when 4 grams or more per day is given, Lincocin should be diluted in no less than 500 ml of either solution, and the rate of administration should not exceed 100 ml/hour. Too rapid intravenous administration of doses exceeding 4 grams may result in hypotension or, in rare instances, cardiopulmonary arrest.

Effective gram-positive antibiotic:

Lincocin IV is effective in respiratory tract, skin and soft-tissue, and bone



infections caused by susceptible strains of pneumococci, streptococci, and staphylococci, including penicillin-resistant strains. Staphylococcal strains resistant to Lincocin (lincomycin hydrochloride, Upjohn) have been covered. Before initiating therapy, culture and susceptibility studies should be performed. Lincocin has proved valuable in treating patients hypersensitive to penicillin or cephalosporins, since Lincocin does not share antigenicity with these compounds. However, hypersensitivity reactions have been reported, some of these in patients known to be sensitive to penicillin.

Well tolerated at infusion site: Lincocin intravenous infusions have not produced local irritation or phlebitis, when given as recommended. Lincocin is usually well tolerated in patients who are hypersensitive to other drugs. Nevertheless, Lincocin should be used cautiously in patients with asthma or significant allergies.

In patients with impaired renal function, the recommended dose of Lincocin should be reduced to 25–30% of the dose for patients with normal kidney function. Its safety in pregnant patients and in infants less than one month of age has not been established.

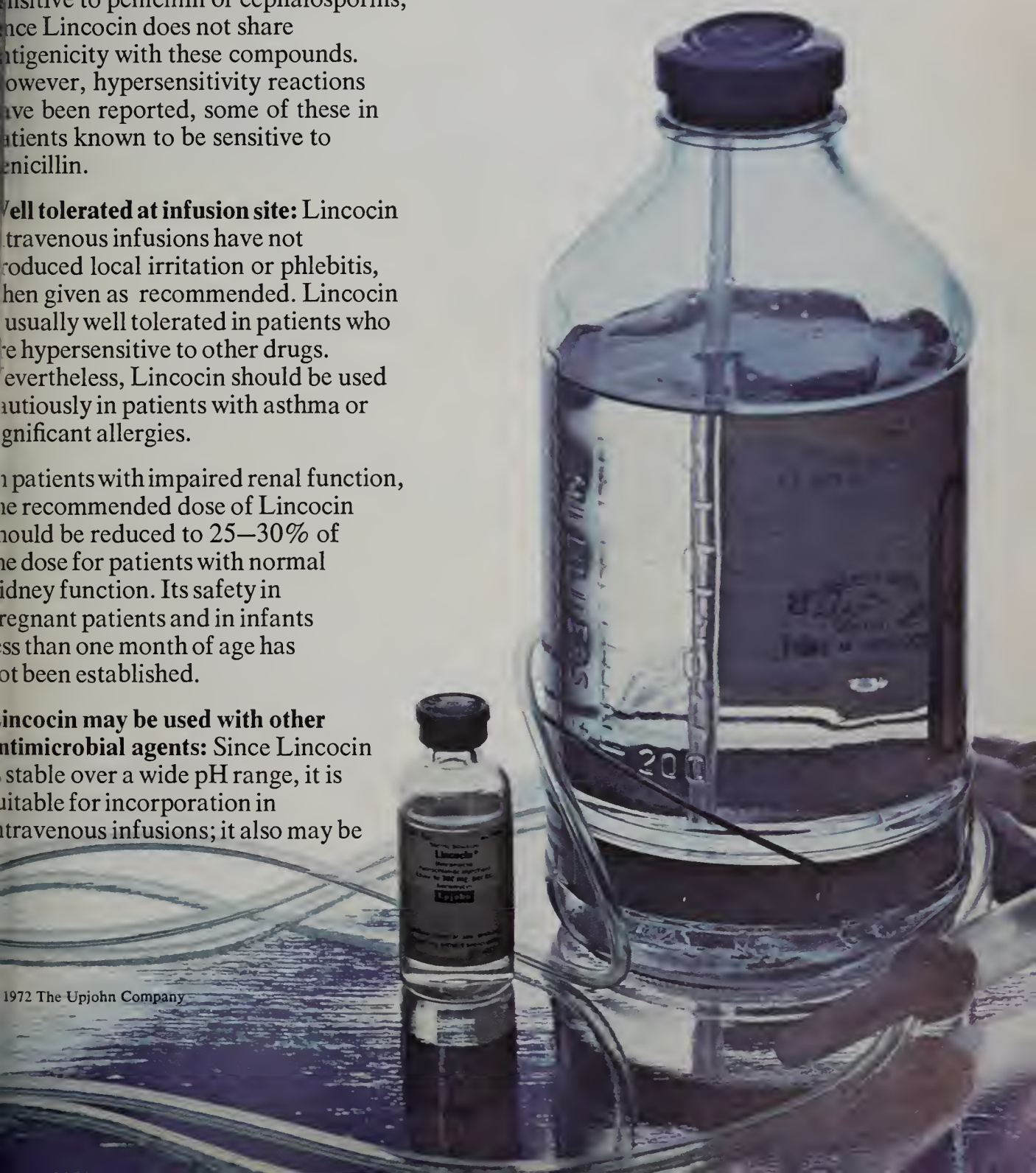
Lincocin may be used with other antimicrobial agents: Since Lincocin is stable over a wide pH range, it is suitable for incorporation in intravenous infusions; it also may be

administered concomitantly with other antimicrobial agents when indicated. However, Lincocin should not be used with erythromycin, as *in vitro* antagonism has been reported.

Lincocin[®]

Sterile Solution (300 mg per ml)
(lincomycin hydrochloride, Upjohn)

For further prescribing information, please see following page.





Sterile Solution (300 mg. per ml.)

Lincocin®

(lincomycin hydrochloride, Upjohn)

Up to 8 grams per day by IV infusion for hospitalized patients with life-threatening infections.

Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. As with all antibiotics, *in vitro* susceptibility studies should be performed.

Each
preparation
contains:

50 mg Pediatric Capsule 250 mg
100 mg Capsule 500 mg
Sterile Solution per 1 ml 300 mg
Syrup per 5 ml 250 mg

Contains also: Benzyl Alcohol 9 mg; and,
Water for Injection—q.s.

Lincocin (lincomycin hydrochloride) is indicated in infections due to susceptible strains of staphylococci, pneumococci, and streptococci. *In vitro* susceptibility studies should be performed. Cross resistance has not been demonstrated with penicillin, ampicillin, cephalosporins, chloramphenicol or the tetracyclines. Some cross resistance with erythromycin has been reported. Studies indicate that Lincocin does not share antigenicity with penicillin compounds.

CONTRAINDICATIONS: History of prior hypersensitivity to lincomycin or clindamycin. Not indicated in the treatment of viral or minor bacterial infections.

WARNINGS: CASES OF SEVERE AND PERSISTENT DIARRHEA HAVE BEEN REPORTED AND HAVE AT TIMES NECESSITATED DISCONTINUANCE OF THE DRUG. THIS DIARRHEA HAS BEEN OCCASIONALLY ASSOCIATED WITH BLOOD AND MUCUS IN THE STOOLS AND HAS AT TIMES RESULTED IN AN ACUTE COLITIS. THIS SIDE EFFECT USUALLY HAS BEEN ASSOCIATED WITH THE ORAL DOSAGE FORM BUT OCCASIONALLY HAS

BEEN REPORTED FOLLOWING PARENTERAL THERAPY. A careful inquiry should be made concerning previous sensitivities to drugs or other allergens. Safety for use in pregnancy has not been established and Lincocin (lincomycin hydrochloride) is not indicated in the newborn. Reduce dose 25 to 30% in patients with severe impairment of renal function.

PRECAUTIONS: Like any drug, Lincocin should be used with caution in patients having a history of asthma or significant allergies. Overgrowth of nonsusceptible organisms, particularly yeasts, may occur and require appropriate measures. Patients with pre-existing monilial infections requiring Lincocin therapy should be given concomitant antimicrobial treatment. During prolonged Lincocin therapy, periodic liver function studies and blood counts should be performed. Not recommended (inadequate data) in patients with pre-existing liver disease unless special clinical circumstances indicate. Continue treatment of β -hemolytic streptococci infections for 10 days to diminish likelihood of rheumatic fever or glomerulonephritis.

ADVERSE REACTIONS: *Gastrointestinal*—Glossitis, stomatitis, nausea, vomiting. Persistent diarrhea, enterocolitis, and pruritus ani. *Hemopoietic*—Neutropenia, leukopenia, agranulocytosis, and thrombocytopenic purpura have been reported. *Hypersensitivity reactions*—Hypersensitivity reactions such as angioneurotic edema, serum sickness, and anaphylaxis have been reported, sometimes in patients sensitive to penicillin. If allergic reaction occurs, discontinue drug. Have epinephrine, corticosteroids, and antihista-

mines available for emergency treatment. *Skin and mucous membranes*—Skin rashes, urticaria, vaginitis, and rare instances of exfoliative and vesiculobullous dermatitis have been reported. *Liver*—Although no direct relationship to liver dysfunction is established, jaundice and abnormal liver function tests (particularly serum transaminase) have been observed in a few instances. *Cardiovascular*—Instances of hypotension following parenteral administration have been reported, particularly after too rapid IV administration. Rare instances of cardiopulmonary arrest have been reported after too rapid IV administration. If 4.0 grams or more administered IV, dilute in 500 ml of fluid and administer no faster than 100 ml per hour. *Special senses*—Tinnitus and vertigo have been reported occasionally. *Local reactions*—Excellent local tolerance demonstrated to intramuscularly administered Lincocin (lincomycin hydrochloride). Reports of pain following injection have been infrequent. Intravenous administration of Lincocin in 250 to 500 ml of 5% glucose in distilled water or normal saline has produced no local irritation or phlebitis.

HOW SUPPLIED: 250 mg and 500 mg Capsules—bottles of 24 and 100. Sterile Solution, 300 mg per ml—2 and 10 ml vials and 2 ml syringe. Syrup, 250 mg per 5 ml—60 ml and pint bottles.

For additional product information, consult the package insert or see your Upjohn representative.

MED B-6-S (KZL-7) JA71-1631

The Upjohn Company
Kalamazoo, Michigan 49001

Upjohn



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For your ulcer and ulcer-prone patients...
a refreshing break from the
boring sameness of white antacids.

- pleasing mint flavor
- non-gritty texture
- formulated to avoid
constipation and laxation



Winthrop

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NEW YORK, N.Y. 10016

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Maybe you're one of those doctors at odds with some AMA policies. Your question is: how do you change them?

First, consider who sets those policies. In a real sense, it is you. You elect the delegates to your state association. They in turn elect the delegates who will represent your views in the AMA House.

As an active, involved member, you can influence policy by making your views known to your delegates, both national and state. It is your democratic right—and responsibility.

Write your delegates, call them, see them. If they aren't responsive, tell them they'll be hearing from you at election time.

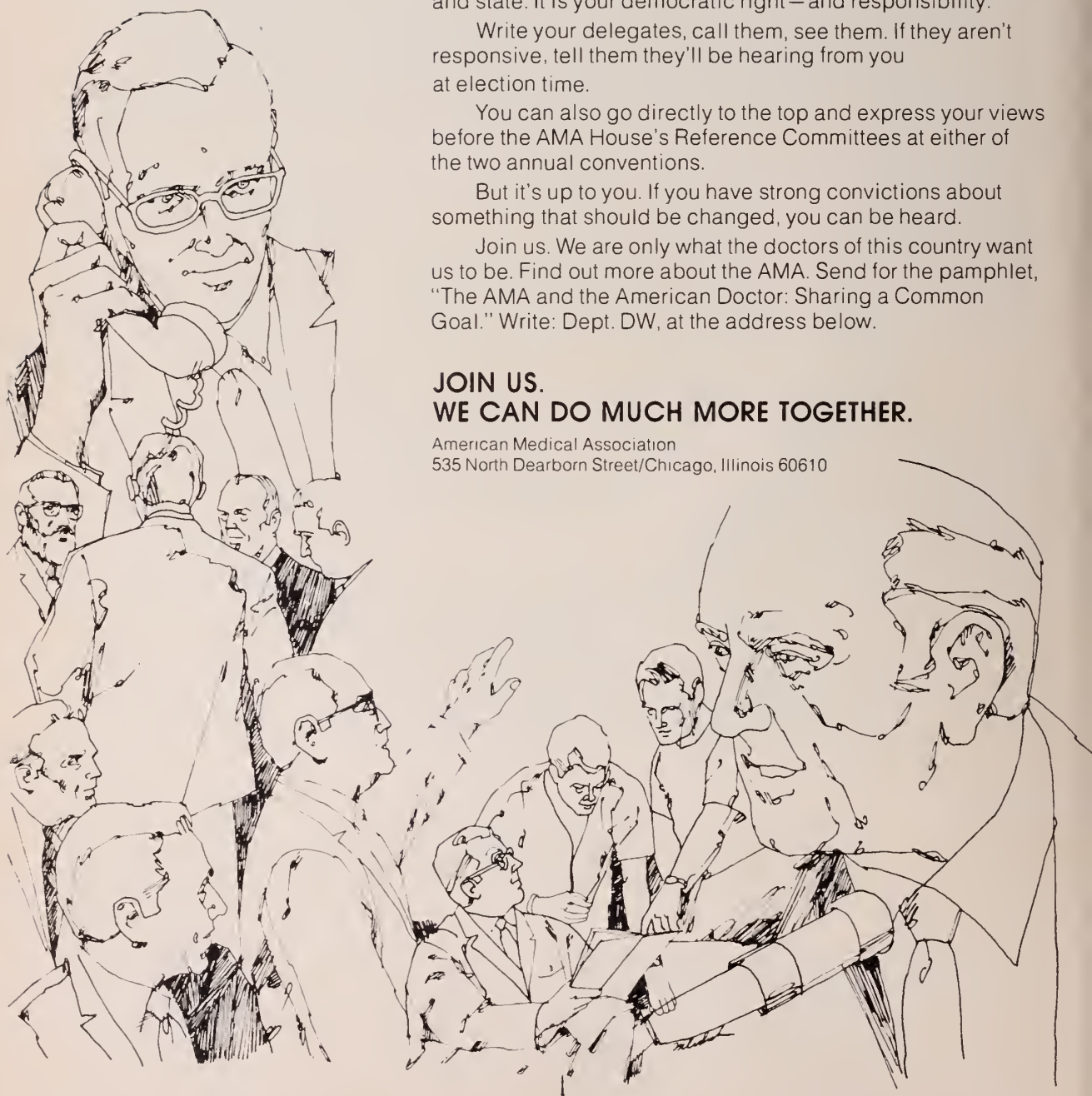
You can also go directly to the top and express your views before the AMA House's Reference Committees at either of the two annual conventions.

But it's up to you. If you have strong convictions about something that should be changed, you can be heard.

Join us. We are only what the doctors of this country want us to be. Find out more about the AMA. Send for the pamphlet, "The AMA and the American Doctor: Sharing a Common Goal." Write: Dept. DW, at the address below.

JOIN US. WE CAN DO MUCH MORE TOGETHER.

American Medical Association
535 North Dearborn Street/Chicago, Illinois 60610



"The history of science, and in particular the history of medicine...is... the history of man's reactions to the truth, the history of the gradual revelation of truth, the history of the gradual liberation of our minds from darkness and prejudice."

— George Sarton, from *"The History of Medicine Versus the History of Art"*

**Would it be useful
in clinical practice to have
government predetermine
drugs of choice?**

Opinion

Results of a survey of physicians:

13.3%

Yes, it would be useful.

86.7%

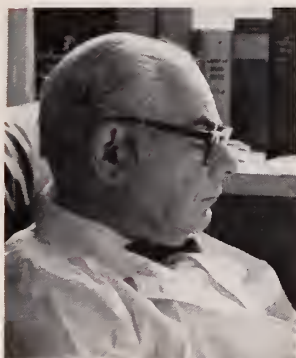
No, it would not be useful.

Dialogue

Would it be useful in clinical practice to have government predetermine drugs of choice?

Doctor of Medicine

Walter Modell, M.D.,
Professor of Pharmacology,
Cornell University
Medical College,
Editor,
Clinical Pharmacology
& Therapeutics,
Drugs of Choice,
Rational Drug Therapy



The proposition that government should determine one or two "drugs of choice" within a given therapeutic class reflects the belief that a similarity in molecular structure insures a close similarity in pharmacologic effect. But this is by no means the rule. An obvious example would be in the field of diuretics, where a small change in chemical structure accounts for substantial dif-

ferences in concomitant effects such as potassium excretion.

Any attempt to dictate the "drug of choice" would be complicated by the fact that some populations demonstrate a bimodal distribution in their reaction to drugs. If the data on drug response are mixed for the total population, one drug will appear to be as useful as the other. But if drug response is reported separately for different segments of the population, drug A will be found to be better for one group and drug B for the other.

It may, of course, be possible to determine drugs of choice in particular categories on a broad statistical basis. But there are always certain patients in whom a drug produces odd, unpredictable or idiosyncratic reactions. So, though a drug might statistically be the most useful one in a given situation, individual variations in response might make it the *incorrect* one.

The point I wish to make is that if two, three, four or more drugs in one class are of approximately equal merit, that in itself is justification for their availability. Exceptional cases do arise in which one drug would be useful to a certain

segment of the population and another drug would be of no use at all. In the practice of medicine, the physician must be prepared to treat the routine as well as the unusual case.

Another objection to the determination of a drug of choice is that precise statements of *relative* efficacy are very difficult to make—much more difficult than statements of efficacy. For example, in testing drug efficacy, it is easy to determine the difference between a drug that is effective in treating a condition and one that is not at all effective. Thus, it is fairly easy to determine whether a drug is more effective than a placebo. But if you compare one drug that is effective with another drug that is also effective, and the relative differences between them are very slight, statements of relative efficacy may be very difficult to make with assurance.

I do not mean to imply that relative efficacy statements are not useful or can never be made. With some groups of drugs (e.g., analgesics), extensive study and precise methodology have yielded useful information on relative efficacy. But in most situations, such information can be acquired only through studies encompassing three to five years of use in many more patients than are used to compare drugs with a placebo for the introduction of a drug into commerce. It is really only after practitioners use a drug extensively that relative safety and efficacy

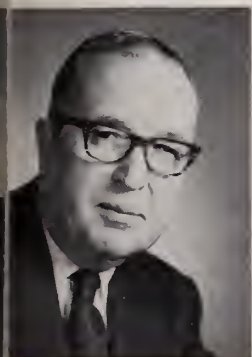
in practice can really be determined.

The Bureau of Drugs suggested the package insert as a possible means of communicating information on relative efficacy of drugs to the physician. I find this objectionable, since I do not believe the physician should have to rely on this source for final scientific truth. There is also a practical objection: Since many physicians actually dispense drugs, they seldom see the package insert. In any event, I would maintain that the physician should know what drug he wants and why without depending on the government or the manufacturer to tell him.

Undoubtedly, physicians are swamped by excess numbers of drugs in so many therapeutic categories. As I am well aware that many drugs within such categories could be eliminated without any loss, or perhaps even some profit, to the practice of medicine. But, in my opinion, neither the FDA nor any other single group has the expertise and the wisdom necessary to determine the "drug of choice" in these areas of medical practice.

Maker of Medicine

Eneth G. Kohlstaedt, M.D.,
Vice President,
Medical Research,
Eli Lilly and Company



In my opinion, it is not the function of any government or private regulatory agency to designate a "drug of choice." This determination should be made by the physician after he has received full information on the properties of a drug, and then it will be based on experience with this drug and his knowledge of the individual patient who is seeking treatment.

When an evaluation of comparative efficacy were to be made, particularly by government, at the time a new drug is being approved for marketing, it would be a great disservice to medicine and thus to the patient and the consumer. For example, when a new therapeutic agent is introduced, on the basis of limited knowledge, it may be considered to be more potent, more effective, or safer than products already on the market. Conceivably, at the time the new drug would be labeled "the drug of choice." But as additional clinical experience is accumulated, new evidence may become available. If, then, it may be apparent

that the established products should not be so easily dismissed.

Variation in patient response to drugs constitutes one of the major obstacles to the determination of "drugs of choice." We are just beginning to open the door on pharmacogenetics, but it is evident that genetic differences cause wide variations in the way drugs are absorbed, metabolized, etc. This fact alone is sufficient to make unrealistic the idea that there is one drug in each class to be used for every human being.

The problem of determining relative drug efficacy is an extremely complicated one. Comparison with other drugs of the same class should not be a prerequisite for marketing a new substance. In some therapeutic areas, it may be difficult to make accurate comparisons. For example, in the treatment of infections it is not possible to conduct crossover studies. Recovery may be influenced by factors which cannot be controlled or measured, i.e., natural host resistance and virulence of infective agents. A drug's acceptability must often be judged on the basis of its own performance, and this may be limited to experience in a relatively small patient population. If the introduction of a new drug must await the adequate establishment of relative efficacy, the duration of clinical trial and extent of studies would be greatly prolonged, particularly for rare or unusual conditions. The availability of a new drug would be delayed. Many patients might suffer needlessly and lives might be lost.

Relative efficacy can best be established by experience in a general patient population through regular channels of clinical practice. The physician considers the patient as a whole, which means the patient often has multiple problems and drugs must be selected with this in mind. Hence, a "drug of choice" in an uncomplicated case may not be the best drug for a patient with associated problems. Publication of well-controlled studies in medical journals may provide comparative evidence; discussions at medical meetings, presentations at postgraduate courses, and the new audiovisual technology may bring evidence to physicians on comparative therapy. In a free medical marketplace, a drug that does not measure up will fall into disuse. For example, broad clinical experience has established vitamin B₁₂ as the "drug of choice" for the treatment of primary pernicious anemia. No amount of advertising or promotional effort by the manufacturer could increase the use of liver extract for this anemia. How-

ever, a physician may wish to employ parenteral liver preparations for a special purpose.

In the field of surgery, peer review in the hospital has brought significant improvement in the use of new techniques and procedures. Something of this nature would be useful in the area of drug therapy. However, it should be developed by the medical profession itself and would necessitate, for its proper function, an improvement in the dissemination of reliable data on clinical pharmacology of drugs under consideration.

Ideally, information on the relative efficacy of drugs should be gathered and assessed by the physicians who actually administer the specific agents to a specific patient population. To do this, they will need even more information on the drugs they use — information that the pharmaceutical manufacturers must begin to provide if government regulation of "drugs of choice" is to be avoided.

Opinion & Dialogue

What is your opinion, doctor?

Send us your comments on the above issue.



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IMAGINE YOUR PRACTICE WITHOUT THEM

In 1957 Beecham scientists discovered and isolated 6-APA, the penicillin nucleus that opened the way to a new generation of semi-synthetic penicillins. Over the past 14 years more than 3000 different semi-synthetic penicillins have been synthesized and evaluated by our staff. The fruits of their work are in your hands today. Others will be in your hands tomorrow.

Need we say more?

Prescribe the discoverer's brands:

Totacillin[®] (ampicillin trihydrate)

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and more to come

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- ☐ Totacillin (ampicillin trihydrate) capsules equivalent to 250 mg. and 500 mg. ampicillin, for oral suspension equivalent to 125 mg./5 cc. and 250 mg./5 cc. ampicillin.
- ☐ Pyopen (disodium carbenicillin) vials for injection equivalent to 1 gm. and 5 gm. of carbenicillin.
- ☐ Bactocill (sodium oxacillin) capsules equivalent to 250 mg. and 500 mg. oxacillin and vials for injection equivalent to 500 mg. and 1 gm. oxacillin.

Why send him to the islets of Langerhans?



Since sulfonylureas promote the release of insulin which is lipogenic and helps transport glucose into adipose tissue...

And since many overweight patients already have normal or high levels of endogenous insulin, why not consider DBI-TD?

It lowers blood sugar without stimulating

insulin secretion from the pancreas. And this may be important to the dieting diabetic.

In adult-onset, nonketotic diabetics uncontrolled by diet alone...

DBI-TD[®] Geigy
phenformin HCl

lowers blood sugar without raising blood insulin.

DBI[®] phenformin HCl
Tablets of 25 mg.

DBI-TD[®] phenformin HCl
Capsules of 50 and 100 mg.

Indications: Stable adult diabetes mellitus; sulfonylurea failures, primary and secondary; adjunct to insulin therapy of unstable diabetes mellitus.

Contraindications: Diabetes mellitus that can be regulated by diet alone; juvenile diabetes mellitus that is uncomplicated and well regulated on insulin; acute complications of diabetes mellitus (metabolic acidosis, coma, infection, gangrene); during or immediately after surgery where insulin is indispensable; severe hepatic disease; renal disease with uremia; cardiovascular collapse (shock); after disease states associated with hypoglycemia.

Warnings: Use during pregnancy is to be avoided.

Precautions: 1. *Starvation Ketosis:* This must be differentiated from "insulin lack" ketosis and is characterized by ketonuria which, in spite of relatively normal blood and urine sugar, may result from excessive phenformin therapy, excessive insulin reduction, or insufficient carbohydrate intake. Adjust insulin dosage, lower phenformin dosage, or supply carbohydrates to alleviate this state. **Do not give insulin without first checking blood and urine sugar.** 2. *Lactic Acidosis:* This drug is not recommended in the presence of azotemia or in any clinical situation that predisposes to sustained hypotension that could lead to lactic acidosis. To differentiate lactic acidosis from ketoacidosis, periodic

determinations of ketones in the blood and urine should be made in diabetics previously stabilized on phenformin, or phenformin and insulin, who have become unstable. If electrolyte imbalance is suspected, periodic determinations should also be made of electrolytes, pH, and the lactate-pyruvate ratio. The drug should be withdrawn and insulin, when required, and other corrective measures instituted immediately upon the appearance of any metabolic acidosis. 3. *Hypoglycemia:* Although hypoglycemic reactions are rare when phenformin is used alone, every precaution should be observed during the dosage adjustment period particularly when insulin or a sulfonylurea has been given in combination with phenformin. **Adverse Reactions:** Principally

gastrointestinal; unpleasant metallic taste, continuing to anorexia, nausea and, less frequently, vomiting and diarrhea. Reduce dosage at first sign of these symptoms. In case of vomiting, the drug should be immediately withdrawn. Although rare, urticaria has been reported, as have gastrointestinal symptoms such as anorexia, nausea and vomiting following excessive alcohol intake. (B) 98-146-103-C

For complete details, including dosage, please see full prescribing information.

GEIGY Pharmaceuticals
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BECAUSE ALLERGIES ARE A YEAR-ROUND THING.

Up to 100 million Americans suffer from allergies. That's why it's going to happen. Novahistine LP. A vasopressor and antihistamine. Its powerful formula if you suffer usually gives you better all-day, all-night relief year-round, from nasal congestion to a itchy throat. And it's available only on your prescription for adults and children over 12.

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Prescription only



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The Dow Chemical Company
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Prompt relief of pain is a lot of what the practice of medicine is all about... East or West.

In much of the Far East, the analgesic efficacy of Empirin® Compound with Codeine would probably be measured against acupuncture, an ancient and traditional therapeutic system.


In America, codeine sets such a high standard for oral analgesia, that it has become a criterion in terms of which other major oral analgesics are most often measured.

Synthetic and other oral analgesics may offer some of the properties of codeine, but not one can provide both its benefits and potency. And codeine provides an antitussive bonus.

Empirin Compound with Codeine

is the most widely used, and probably the most pharmaceutically elegant analgesic preparation providing codeine. It's the time-tested combination for predictable pain relief... whether the pain is visceral or musculoskeletal; acute or chronic.



 New prescription flexibility. At your discretion, and where state law permits, a prescription for Empirin Compound with Codeine may now be refilled up to five times in six months.

Empirin Compound with Codeine No. 3 contains codeine phosphate (32.4 mg.) gr. 1/2. No. 4 contains codeine phosphate* (64.8 mg.) gr. 1. *(Warning—may be habit-forming.) Each tablet also*

contains: aspirin

gr. 3 1/2, phen-

acetin gr.

2 1/2, caf-

feine gr. 1/2.

Bottles of

100 and 1000.



But for relief of Western pain

EMPIRIN®
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When irritable colon feels like this



in the presence of spasm or hypermotility,
gas distension and discomfort, **KINESED®**
provides more complete relief:

- ☐ belladonna alkaloids—for the hyperactive bowel
- ☐ simethicone—for accompanying distension and pain due to gas
- ☐ phenobarbital—for associated anxiety and tension

Composition: Each chewable, fruit-flavored, scored tablet contains: 16 mg. phenobarbital (warning: may be habit-forming); 0.1 mg. hyoscyamine sulfate; 0.02 mg. atropine sulfate; 0.007 mg. scopolamine hydrobromide; 40 mg. simethicone.

Contraindications: Hypersensitivity to barbiturates or belladonna alkaloids, glaucoma, advanced renal or hepatic disease.

Precautions: Administer with caution to patients with incipient glaucoma, bladder neck obstruction or uri-

nary bladder atony. Prolonged use of barbiturates may be habit-forming.

Side effects: Blurred vision, dry mouth, dysuria, and other atropine-like side effects may occur at high doses, but are only rarely noted at recommended dosages.

Dosage: Adults: One or two tablets three or four times daily. Dosage can be adjusted depending on diagnosis and severity of symptoms. Children 2 to 12 years: One half or one tablet three or four times daily. Tablets may be chewed or swallowed with liquids.



STUART PHARMACEUTICALS | Pasadena, California 91109 | Division of **ATLAS CHEMICAL INDUSTRIES, INC.**

(from the Greek *kinetikos*,
to move,
and the Latin *sedatus*,
to calm)

KINESED®

antispasmodic/sedative/antiflatulent

spring peeper (tree frog, *Hyla crucifer*):
this small amphibian can expand
its throat membrane with air until it is
twice the size of its head.

Will his return to work mean the return of undue psychic tension?



When it's mandatory to keep the post-coronary patient calm, consider Valium (diazepam).

Although he's promised to take it easy back on the job, you know he's going back to the same stressful circumstances that may have contributed to his hospitalization. If he experiences excessive anxiety and tension because of overreaction to stress, your prescription for Valium can bring relief. During the period of readjustment Valium can quiet undue anxiety.

For moderate states of psychic tension, 5-mg or 2-mg Valium tablets *b.i.d.* to *q.i.d.* can usually provide reliable relief. For severe tension/anxiety

states, the 10-mg tablets often produce desired results.

The most commonly reported side effects are drowsiness, ataxia and fatigue. Until individual response is determined, caution patient against driving or operating dangerous machinery.

LIBRARY

Valium® (diazepam)

AUG - 2 1972 For the tense cardiac patient who must be kept calm

NEW YORK ACADEMY
OF MEDICINE

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures.

Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision.

Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

Dosage: Individualize for maximum beneficial effect. **Adults:** Tension, anxiety and psychoneurotic states, 2 to 10 mg *b.i.d.* to *q.i.d.*; alcoholism, 10 mg *t.i.d.* or *q.i.d.* in first 24 hours, then 5 mg *t.i.d.* or *q.i.d.* as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg *t.i.d.* or *q.i.d.*; adjunctively in convulsive disorders, 2 to 10 mg *b.i.d.* to *q.i.d.*. **Geriatric or debilitated patients:** 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) **Children:** 1 to 2½ mg *t.i.d.* or *q.i.d.* initially, increasing as needed and tolerated (not for use under 6 months).

Supplied: Valium® (diazepam) Tablets, 2 mg, 5 mg and 10 mg; bottles of 100 and 500. All strengths also available in Tel-E-Dose® packages of 1000.

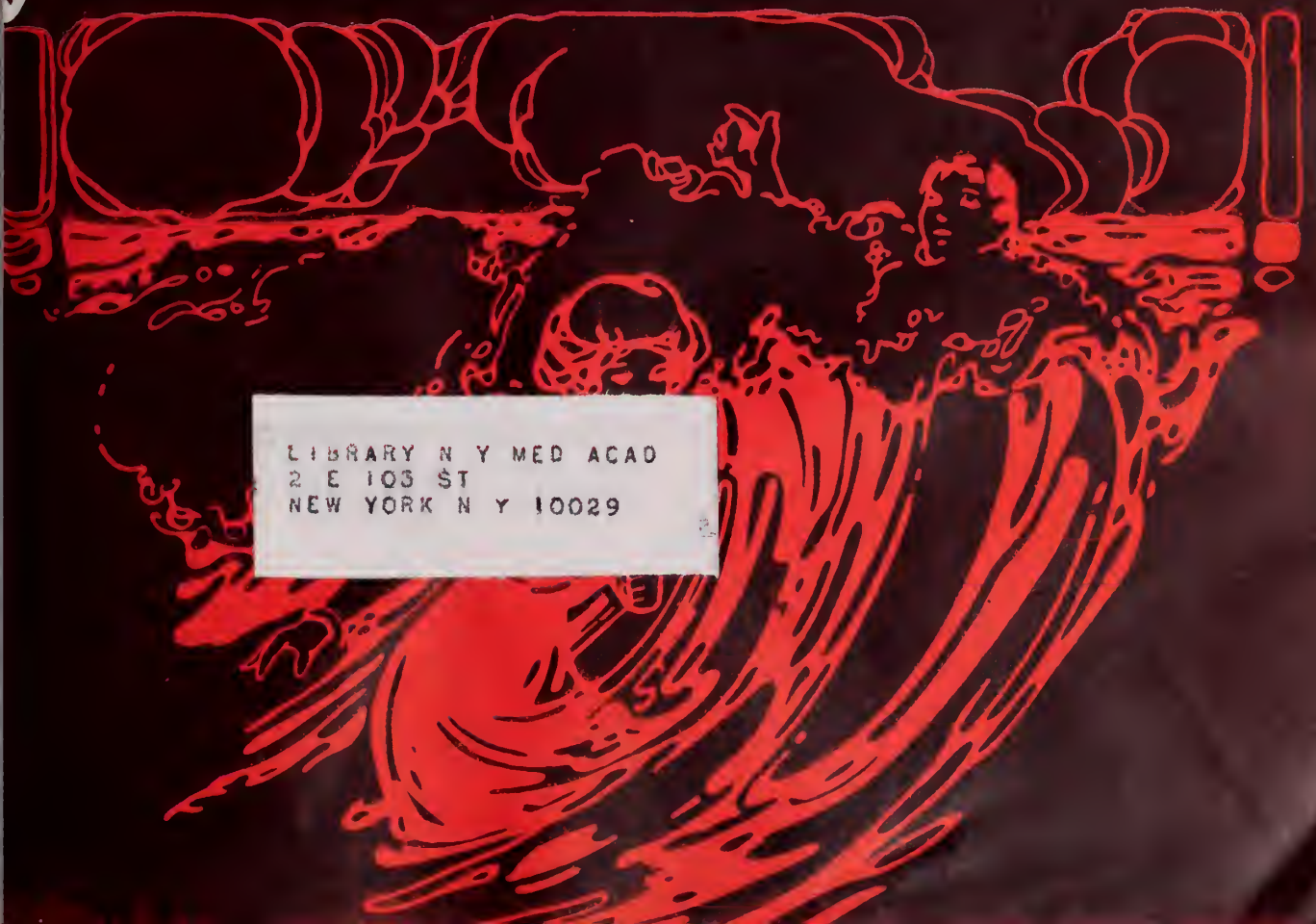
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Roche Laboratories
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Nutley, N. J. 07110

Journal BALCONY

OKLAHOMA STATE MEDICAL ASSOCIATION

August



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Everybody experiences psychic tension.



Most people can handle this tension.



Some people develop excessive psychic tension and need your counseling,



and a few may need counseling
and the psychotropic action of Valium® (diazepam).

Before deciding to make Valium (diazepam) part of your treatment plan, check on whether or not the patient is presently taking drugs and, if so, what his response has been. Along with the medical and social history, this information can help you determine initial dosage, the possibility of side effects and the ultimate prospects of success or failure.

While Valium can be a most helpful adjunct to your counseling, it should be prescribed only as long as excessive psychic tension persists and should be discontinued when you decide it has accomplished its therapeutic task. In general, when dosage guidelines are followed, Valium is well tolerated (see Dosage). For convenience it is available in 2-mg, 5-mg and 10-mg tablets.

Drowsiness, fatigue and ataxia have been the most commonly reported side effects.

Until response is determined, patients receiving Valium should be cautioned against engaging in hazardous occupations requiring complete mental alertness, such as driving or operating machinery.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

Dosage: Individualize for maximum beneficial effect. *Adults:* Tension, anxiety and psychoneurotic states, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

Supplied: Valium® (diazepam) Tablets, 2 mg, 5 mg and 10 mg; bottles of 100 and 500. All strengths also available in Tel-E-Dose® packages of 1000.



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The
JOURNAL

AUGUST
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The science of treating gas pain

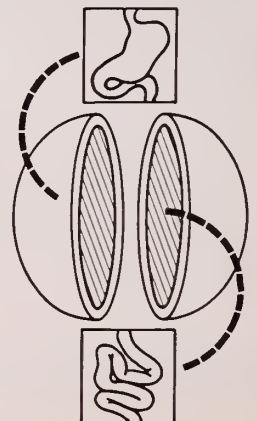
1. When gas is *entrapped* in the G.I. tract, it can cause pain severe enough to mimic that of peptic ulcer, angina pectoris, or myocardial infarction.^{1,2} **2.** Most of the gas symptoms brought to your attention will be due to gas trapped in the intestines, not the stomach. **3.** The source of most G.I. gas is air-swallowing, often an anxiety response of which the patient is unaware.

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Sig.: One Phasil tablet before meals and at bedtime provides reliable relief of gas pain, bloating and distention. Available in bottles of 100 tablets.

References: **1.** Roth, J. L.: *Ann. N.Y. Acad. Sci.* 150:109, Feb. 26, 1968. **2.** Reich, N. E., and Fremont, R. E. (eds.): *Chest Pain*, The Macmillan Company, New York, 1961, p. 348.



Reed & Carnrick/Kenilworth, N.J. 07033

Encounter under the Scanning Electron Microscope



SEM reveals changes in *E. coli* exposed to antibacterial agents

The Scanning Electron Microscope (SEM) is the only instrument which gives 3-dimensional views on a microscopic level. This permits the surface morphology of microorganisms to be observed in

detailed perspective. Changes in surface morphology of *E. coli* exposed to various antimicrobial agents are seen on the following page. An SEM photomicrograph of normal control *E. coli* appears above.



E. coli + sulfamethoxazole



E. coli + tetracycline



E. coli + cephalothin



E. coli + ampicillin

Different modes of antibacterial action — Similar changes in morphology

As part of a series of experiments,^{1,3} strains of *E. coli* proven susceptible to each antibacterial agent were exposed to 1 MIC of the respective antibacterials for a three-hour period. Included were cell-wall-active drugs, ampicillin and cephalothin; a drug interfering with intracellular protein synthesis, tetracycline; and a chemical agent which acts by interference with para-aminobenzoic acid, sulfamethoxazole.

As seen above, elongation of the bacilli, mid-cell defects and spheroplast-like forms may be appreciated with the SEM technique. These changes in bacterial morphology were similar... regardless of the antibacterial agent used and irrespective of

its mechanism of action.

"At present, the significance of these observations in clinical infection must be considered with caution, but it is hoped that these data will stimulate a reevaluation of present concepts of the nature and role of morphological variants of bacteria exposed to a variety of antibacterial factors."²

References:

1. Klainer, A. S.; Fass, R. J., and Perkins, R. L.: Scientific Exhibit presented at the 25th American Medical Association Clinical Convention, New Orleans, La., Nov. 28-Dec. 1, 1971.
2. Klainer, A. S., and Perkins, R. L.: *Antimicrob. Agents Chemother.*, 1:164, 1972.
3. Klainer, A. S.: Data on file, Hoffmann-La Roche Inc., Nutley, N.J.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Effective in acute, recurrent or chronic urinary tract infections (primarily pyelonephritis, pyelitis and cystitis) due to susceptible organisms (usually *E. coli*, *Klebsiella-Aerobacter*, *Staphylococcus aureus*, *Proteus mirabilis*, and, less frequently, *Proteus vulgaris*) and in the absence of obstructive uropathy or foreign bodies.

Note: Since *in vitro* sulfonamide sensitivity tests are not always reliable, carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response. Add aminobenzoic acid to culture media of patients receiving sulfonamides. The increasing frequency of resistant organisms is a limitation of usefulness of antibacterial agents, including sulfonamides, especially in chronic or recurrent urinary tract infections.

Blood levels should be measured in patients receiving sulfonamides for serious infections, since there may be wide variations with identical doses; 20 mg/100 ml should be the maximum total sul-

fonamide level, as adverse reactions occur more frequently above this level.

Contraindications: Sulfonamide hypersensitivity; infants less than 2 months of age (except adjunctively with pyrimethamine in congenital toxoplasmosis); pregnancy at term and during nursing period.

Warnings: Safe use in pregnancy has not been established, and teratogenicity potential has not been thoroughly investigated. Sulfonamides will not eradicate or prevent sequelae to group A streptococcal infections, i.e., rheumatic fever, glomerulonephritis. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been reported; early clinical signs such as sore throat, fever, pallor, purpura or jaundice may indicate serious blood disorders. Complete blood counts and urinalysis with careful microscopic examination are recommended frequently during sulfonamide therapy. Clinical data are insufficient on prolonged or recurrent therapy in chronic renal diseases of children under 6 years.

Encounter in Clinical Practice

Control of primary bacterial offenders

Antibacterial Gantanol® (sulfamethoxazole) controls susceptible strains of *E. coli* and other gram-negative and gram-positive organisms

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Prompt antibacterial blood and urine levels

In from 2 to 3 hours after the initial 2-Gm adult dose, antibacterial levels are present in

both the blood and urine.

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Subsequent 1-Gm doses provide up to 12 hours of antibacterial coverage. More severe u.t.i. may require a q. 8h. dosage regimen. Either schedule provides coverage during the waking

and sleeping hours—especially important during hours of sleep when normal urinary retention tends to favor bacterial proliferation.

Also effective in nonobstructed chronic and recurrent u.t.i.

It is not uncommon for the elderly and the debilitated to develop chronic and/or recurrent nonobstructed urinary tract infections such as pyelonephritis and cystitis. Such cases often re-

spond satisfactorily to Gantanol. The increasing frequency of resistant organisms is a limitation of usefulness of antibacterial agents, including sulfonamides, especially in chronic or recurrent u.t.i.

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Either dosage form—the Tablets or the pleasant-tasting, cherry-flavored Suspension—can provide the dependable antibacterial activity necessary to control susceptible nonobstructed cystitis and pyelonephritis. Symptomatic improvement may usually be expected in 24 to 48 hours. The usual precautions with sulfonamide

therapy should be observed, including adequate fluid intake. Gantanol (sulfamethoxazole) is generally well tolerated with relative freedom from complications; the most common side effects are nausea, vomiting and diarrhea. Frequent c.b.c.'s and urinalyses with microscopic examination are recommended.

In nonobstructed cystitis and pyelonephritis due to susceptible organisms

Gantanol®
(sulfamethoxazole)
Basic Therapy

Precautions: Use with caution in patients with impaired renal or hepatic function, severe allergy, bronchial asthma and in glucose-6-phosphate dehydrogenase-deficient individuals. In the latter, dose-related hemolysis may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias:* agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia; *allergic reactions:* erythema multiforme (Stevens-Johnson syndrome), skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis; *gastrointestinal reactions:* nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis; *C.N.S. reactions:* headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia; and *miscellaneous reactions:* drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon. Due to

certain chemical similarities with some goitrogens, diuretics (acetazolamide and thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia. Cross-sensitivity with these agents may exist.

Dosage: Systemic sulfonamides are contraindicated in infants under 2 months of age, except adjunctively with pyrimethamine in congenital toxoplasmosis. Usual dosage is as follows:

Adults—2 Gm (4 tabs or teasp.) initially, then 1 Gm (2 tabs or teasp.) b.i.d. or t.i.d. depending on severity of infection. *Children*—0.5 Gm (1 tab or teasp.)/20 lbs of body weight initially, followed by 0.25 Gm/20 lbs (½ tab or teasp.) b.i.d. Maximum dose for children should not exceed 75 mg/kg/24 hrs.

Supplied: Tablets, 0.5 Gm sulfamethoxazole; Suspension, 0.5 Gm sulfamethoxazole/teaspoonful.



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oxyphenbutazone NF

tablets of 100 mg.

Important Note: This drug is not a simple analgesic. Do not administer casually. Carefully evaluate patients before starting treatment and keep them under close supervision. Obtain a detailed history, and complete physical and laboratory examination (complete hemogram, urinalysis, etc.) before prescribing and at frequent intervals thereafter. Carefully select patients, avoiding those responsive to routine measures, contraindicated patients or those who cannot be observed frequently. Warn patients not to exceed recommended dosage. Short-term relief of severe symptoms with the smallest possible dosage is the goal of therapy. Dosage should be taken with meals or a full glass of milk. Patients should discontinue the drug and report immediately any sign of: fever, sore throat, oral lesions (symptoms of blood dyscrasia); dyspepsia, epigastric pain, symptoms of anemia, black or tarry stools or other evidence of intestinal ulceration or hemorrhage, skin reactions, significant weight gain or edema. A one-week trial period is adequate. Discontinue in the absence of a favorable response. Restrict treatment periods to one week in patients over sixty.

Indications: Acute gouty arthritis, rheumatoid arthritis, rheumatoid spondylitis.

Contraindications: Children 14 years or less; senile patients; history or symptoms of G.I. inflammation or ulceration including severe, recurrent or persistent dyspepsia; history or presence of drug allergy; blood dyscrasias; renal, hepatic or cardiac dysfunction; hypertension; thyroid disease; systemic edema; stomatitis and salivary gland enlargement due to the drug; polymyalgia rheumatica and temporal arteritis; patients receiving other potent chemotherapeutic agents, or long-term anticoagulant therapy.

Warnings: Age, weight, dosage, duration of therapy, existence of concomitant diseases, and concurrent potent chemotherapy affect incidence of toxic reactions. Carefully instruct and observe the individual patient, especially the aging (forty years and over) who have increased susceptibility to the toxicity of the drug. Use lowest effective dosage. Weigh initially unpredictable benefits against potential risk of severe, even fatal, reactions. The disease condition itself is

unaltered by the drug. Use with caution in first trimester of pregnancy and in nursing mothers. Drug may appear in cord blood and breast milk. Serious, even fatal, blood dyscrasias, including aplastic anemia, may occur suddenly despite regular hemograms, and may become manifest days or weeks after cessation of drug. Any significant change in total white count, relative decrease in granulocytes, appearance of immature forms, or fall in hematocrit should signal immediate cessation of therapy and complete hematologic investigation. Unexplained bleeding involving CNS, adrenals, and G.I. tract has occurred. The drug may potentiate action of insulin, sulfonyleurea, and sulfonamide-type agents. Carefully observe patients taking these agents. Nontoxic and toxic goiters and myxedema have been reported (the drug reduces iodine uptake by the thyroid). Blurred vision can be a significant toxic symptom worthy of a complete ophthalmological examination. Swelling of ankles or face in patients under sixty may be prevented by reducing dosage. If edema occurs in patients over sixty, discontinue drug.

Precautions: The following should be accomplished at regular intervals: Careful detailed history for disease being treated and detection of earliest signs of adverse reactions; complete physical examination including check of patient's weight; complete weekly (especially for the aging) or an every two week blood check; pertinent laboratory studies. Caution patients about participating in activity requiring alertness and coordination, as driving a car, etc. Cases of leukemia have been reported in patients with a history of short- and long-term therapy. The majority of these patients were over forty. Remember that arthritic-type pains can be the presenting symptom of leukemia.

Adverse Reactions: This is a potent drug; its misuse can lead to serious results. Review detailed information before beginning therapy. Ulcerative esophagitis, acute and reactivated gastric and duodenal ulcer with perforation and hemorrhage, ulceration and perforation of large bowel, occult G.I. bleeding with anemia, gastritis, epigastric pain, hematemesis, dyspepsia, nausea, vomiting and diarrhea, abdominal

distention, agranulocytosis, aplastic anemia, hemolytic anemia, anemia due to blood loss including occult G.I. bleeding, thrombocytopenia, pancytopenia, leukemia, leukopenia, bone marrow depression, sodium and chloride retention, water retention and edema, plasma dilution, respiratory alkalosis, metabolic acidosis, fatal and nonfatal hepatitis (cholestasis may or may not be prominent), petechiae, purpura without thrombocytopenia, toxic pruritus, erythema nodosum, erythema multiforme, Stevens-Johnson syndrome, Lyell's syndrome (toxic necrotizing epidermolysis), exfoliative dermatitis, serum sickness, hypersensitivity angitis (polyarteritis), anaphylactic shock, urticaria, arthralgia, fever, rashes (all allergic reactions require prompt and permanent withdrawal of the drug), proteinuria, hematuria, oliguria, anuria, renal failure with azotemia, glomerulonephritis, acute tubular necrosis, nephrotic syndrome, bilateral renal cortical necrosis, renal stones, ureteral obstruction with uric acid crystals due to uricosuric action of drug, impaired renal function, cardiac decompensation, hypertension, pericarditis, diffuse interstitial myocarditis with muscle necrosis, perivascular granulomata, aggravation of temporal arteritis in patients with polymyalgia rheumatica, optic neuritis, blurred vision, retinal hemorrhage, toxic amblyopia, retinal detachment, hearing loss, hyperglycemia, thyroid hyperplasia, toxic goiter association of hyperthyroidism and hypothyroidism (causal relationship not established), agitation, confusion states, lethargy; CNS reactions associated with overdosage, including convulsions, euphoria, psychosis, depression, headaches, hallucinations, giddiness, vertigo, coma, hyperventilation, insomnia; ulcerative stomatitis, salivary gland enlargement. (B) 98-146-800-E

For complete details, including dosage, please see full prescribing information.

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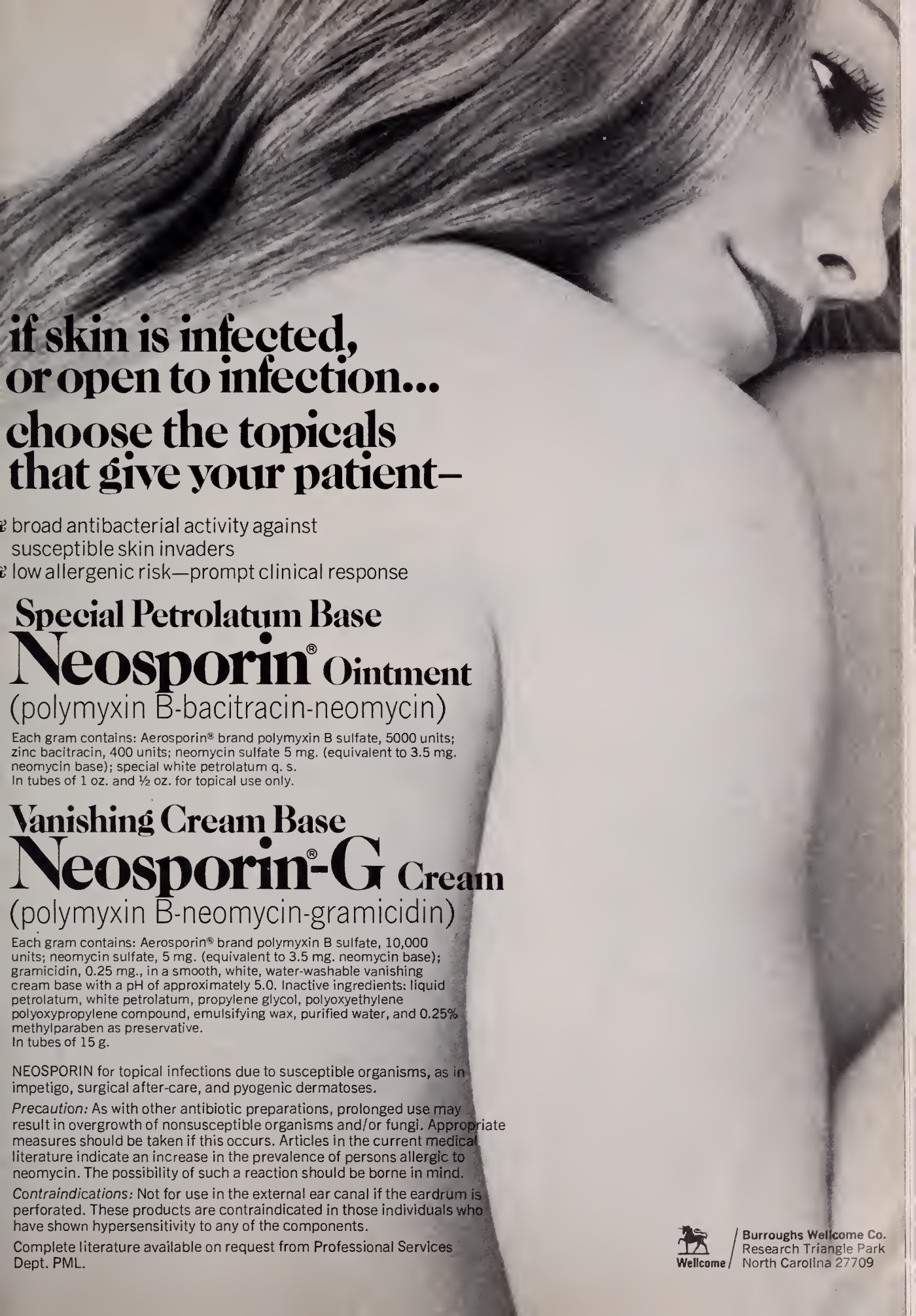
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In tubes of 1 oz. and ½ oz. for topical use only.

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Each gram contains: Aerosporin[®] brand polymyxin B sulfate, 10,000
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In tubes of 15 g.

NEOSPORIN for topical infections due to susceptible organisms, as in
impetigo, surgical after-care, and pyogenic dermatoses.

Precaution: As with other antibiotic preparations, prolonged use may
result in overgrowth of nonsusceptible organisms and/or fungi. Appropriate
measures should be taken if this occurs. Articles in the current medical
literature indicate an increase in the prevalence of persons allergic to
neomycin. The possibility of such a reaction should be borne in mind.

Contraindications: Not for use in the external ear canal if the eardrum is
perforated. These products are contraindicated in those individuals who
have shown hypersensitivity to any of the components.

Complete literature available on request from Professional Services
Dept. PML.



Burroughs Wellcome Co.
Research Triangle Park
North Carolina 27709



When you select this familiar antibiotic for IV infusion you have available a broad dosage range that hospitalized patients may need.

Intravenous Lincocin (lincomycin hydrochloride, Upjohn), with its 1.2 to 8 grams/day dosage range, covers many serious and even life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. Lincocin IV therefore can be as useful in your hospitalized patients as its IM use has proved to be in your office patients. As with all antibiotics, *in vitro* susceptibility studies should be performed.

1.2 to 8 grams/day IV dosage range:

Most hospitalized patients with uncomplicated pneumonias respond satisfactorily to 1.2 to 1.8 grams/day of Lincocin IV. These doses may have to be increased for more serious infections.

In life-threatening situations as much as 8 grams/day has been administered intravenously to adults.

In usual IV doses, Lincocin (lincomycin hydrochloride, Upjohn) should be diluted in 250 ml or more of normal saline solution or 5% glucose in water. But when 4 grams or more per day is given, Lincocin should be diluted in not less than 500 ml of either solution, and the rate of administration should not exceed 100 ml/hour. Too rapid intravenous administration of doses exceeding 4 grams may result in hypotension or, in rare instances, cardiopulmonary arrest.

Effective gram-positive antibiotic:

Lincocin IV is effective in respiratory tract, skin and soft-tissue, and bone



infections caused by susceptible strains of pneumococci, streptococci, and staphylococci, including penicillin-resistant strains. Staphylococcal strains resistant to Lincocin (lincomycin hydrochloride, Upjohn) have been recovered. Before initiating therapy, culture and susceptibility studies should be performed. Lincocin has proved valuable in treating patients hypersensitive to penicillin or cephalosporins, since Lincocin does not share antigenicity with these compounds. However, hypersensitivity reactions have been reported, some of these in patients known to be sensitive to penicillin.

Well tolerated at infusion site: Lincocin intravenous infusions have not produced local irritation or phlebitis, when given as recommended. Lincocin is usually well tolerated in patients who are hypersensitive to other drugs. Nevertheless, Lincocin should be used cautiously in patients with asthma or significant allergies.

In patients with impaired renal function, the recommended dose of Lincocin should be reduced to 25–30% of the dose for patients with normal kidney function. Its safety in pregnant patients and in infants less than one month of age has not been established.

Lincocin may be used with other antimicrobial agents: Since Lincocin is stable over a wide pH range, it is suitable for incorporation in intravenous infusions; it also may be

administered concomitantly with other antimicrobial agents when indicated. However, Lincocin should not be used with erythromycin, as *in vitro* antagonism has been reported.

Lincocin®

Sterile Solution (300 mg per ml)

(lincomycin hydrochloride, Upjohn)

For further prescribing information, please see following page.





Sterile Solution (300 mg. per ml.)

Lincocin[®]

(lincomycin hydrochloride, Upjohn)

Up to 8 grams per day by IV infusion for hospitalized patients with life-threatening infections.

Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. As with all antibiotics, *in vitro* susceptibility studies should be performed.

Each preparation contains:

Lincomycin hydrochloride monohydrate equivalent to lincomycin base

250 mg Pediatric Capsule 250 mg
500 mg Capsule 500 mg
*Sterile Solution per 1 ml 300 mg
Syrup per 5 ml 250 mg

*Contains also: Benzyl Alcohol 9 mg; and, Water for Injection—q.s.

Lincocin (lincomycin hydrochloride) is indicated in infections due to susceptible strains of staphylococci, pneumococci, and streptococci. *In vitro* susceptibility studies should be performed. Cross resistance has not been demonstrated with penicillin, ampicillin, cephalosporins, chloramphenicol or the tetracyclines. Some cross resistance with erythromycin has been reported. Studies indicate that Lincocin does not share antigenicity with penicillin compounds.

CONTRAINDICATIONS: History of prior hypersensitivity to lincomycin or clindamycin. Not indicated in the treatment of viral or minor bacterial infections.

WARNINGS: CASES OF SEVERE AND PERSISTENT DIARRHEA HAVE BEEN REPORTED AND HAVE AT TIMES NECESSITATED DISCONTINUANCE OF THE DRUG. THIS DIARRHEA HAS BEEN OCCASIONALLY ASSOCIATED WITH BLOOD AND MUCUS IN THE STOOLS AND HAS AT TIMES RESULTED IN AN ACUTE COLITIS. THIS SIDE EFFECT USUALLY HAS BEEN ASSOCIATED WITH THE ORAL DOSAGE FORM BUT OCCASIONALLY HAS

BEEN REPORTED FOLLOWING PARENTERAL THERAPY. A careful inquiry should be made concerning previous sensitivities to drugs or other allergens. Safety for use in pregnancy has not been established and Lincocin (lincomycin hydrochloride) is not indicated in the newborn. Reduce dose 25 to 30% in patients with severe impairment of renal function.

PRECAUTIONS: Like any drug, Lincocin should be used with caution in patients having a history of asthma or significant allergies. Overgrowth of nonsusceptible organisms, particularly yeasts, may occur and require appropriate measures. Patients with pre-existing monilial infections requiring Lincocin therapy should be given concomitant antimicrobial treatment. During prolonged Lincocin therapy, periodic liver function studies and blood counts should be performed. Not recommended (inadequate data) in patients with pre-existing liver disease unless special clinical circumstances indicate. Continue treatment of β -hemolytic streptococci infections for 10 days to diminish likelihood of rheumatic fever or glomerulonephritis.

ADVERSE REACTIONS: *Gastrointestinal*—Glossitis, stomatitis, nausea, vomiting. Persistent diarrhea, enterocolitis, and pruritus ani. *Hemopoietic*—Neutropenia, leukopenia, agranulocytosis, and thrombocytopenic purpura have been reported. *Hypersensitivity reactions*—Hypersensitivity reactions such as angioneurotic edema, serum sickness, and anaphylaxis have been reported, sometimes in patients sensitive to penicillin. If allergic reaction occurs, discontinue drug. Have epinephrine, corticosteroids, and antihista-

mines available for emergency treatment. *Skin and mucous membranes*—Skin rashes, urticaria, vaginitis, and rare instances of exfoliative and vesiculobullous dermatitis have been reported. *Liver*—Although no direct relationship to liver dysfunction is established, jaundice and abnormal liver function tests (particularly serum transaminase) have been observed in a few instances. *Cardiovascular*—Instances of hypotension following parenteral administration have been reported, particularly after too rapid IV administration. Rare instances of cardiopulmonary arrest have been reported after too rapid IV administration. If 4.0 grams or more administered IV, dilute in 500 ml of fluid and administer no faster than 100 ml per hour. *Special senses*—Tinnitus and vertigo have been reported occasionally. *Local reactions*—Excellent local tolerance demonstrated to intramuscularly administered Lincocin (lincomycin hydrochloride). Reports of pain following injection have been infrequent. Intravenous administration of Lincocin in 250 to 500 ml of 5% glucose in distilled water or normal saline has produced no local irritation or phlebitis.

HOW SUPPLIED: 250 mg and 500 mg Capsules—bottles of 24 and 100. Sterile Solution, 300 mg per ml—2 and 10 ml vials and 2 ml syringe. Syrup, 250 mg per 5 ml—60 ml and pint bottles.

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—George Sarton, from "The History of Medicine Versus the History of Art"

**Would it be useful
in clinical practice to have
government predetermine
drugs of choice?**

Opinion

Results of a survey of physicians:

13.3%

Yes, it would be useful.

86.7%

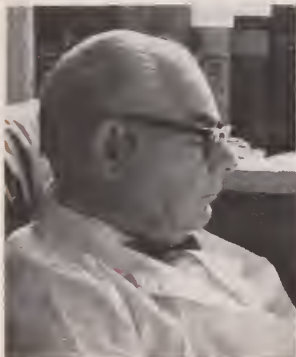
No, it would not be useful.

Dialogue

Would it be useful in clinical practice to have government predetermine drugs of choice?

Doctor of Medicine

Walter Modell, M.D.,
Professor of Pharmacology,
Cornell University
Medical College,
Editor,
Clinical Pharmacology
& Therapeutics,
Drugs of Choice,
Rational Drug Therapy



The proposition that government should determine one or two "drugs of choice" within a given therapeutic class reflects the belief that a similarity in molecular structure insures a close similarity in pharmacologic effect. But this is by no means the rule. An obvious example would be in the field of diuretics, where a small change in chemical structure accounts for substantial dif-

ferences in concomitant effects such as potassium excretion.

Any attempt to dictate the "drug of choice" would be complicated by the fact that some populations demonstrate a bimodal distribution in their reaction to drugs. If the data on drug response are mixed for the total population, one drug will appear to be as useful as the other. But if drug response is reported separately for different segments of the population, drug A will be found to be better for one group and drug B for the other.

It may, of course, be possible to determine drugs of choice in particular categories on a broad statistical basis. But there are always certain patients in whom a drug produces odd, unpredictable or idiosyncratic reactions. So, though a drug might statistically be the most useful one in a given situation, individual variations in response might make it the *incorrect* one.

The point I wish to make is that if two, three, four or more drugs in one class are of approximately equal merit, that in itself is justification for their availability. Exceptional cases do arise in which one drug would be useful to a certain

segment of the population and another drug would be of no use at all. In the practice of medicine, the physician must be prepared to treat the routine as well as the unusual case.

Another objection to the determination of a drug of choice is that precise statements of *relative* efficacy are very difficult to make—much more difficult than statements of efficacy. For example, in testing drug efficacy, it is easy to determine the difference between a drug that is effective in treating a condition and one that is not at all effective. Thus, it is fairly easy to determine whether a drug is more effective than a placebo. But if you compare one drug that is effective with another drug that is also effective, and the relative differences between them are very slight, statements of relative efficacy may be very difficult to make with assurance.

I do not mean to imply that relative efficacy statements are not useful or can never be made. With some groups of drugs (e.g., analgesics), extensive study and precise methodology have yielded useful information on relative efficacy. But in most situations, such information can be acquired only through studies encompassing three to five years of use in many more patients than are used to compare drugs with a placebo for the introduction of a drug into commerce. It is really only after practitioners use a drug extensively that relative safety and efficacy

in practice can really be determined.

The Bureau of Drugs has suggested the package insert as a possible means of communicating information on relative efficacy of drugs to the physician. I find this objectionable, since I do not believe the physician should have to rely on this source for final scientific truth. There is also a practical objection: Since few physicians actually dispense drugs, they seldom see the package insert. In any event, I would maintain that the physician should know what drug he wants and why without depending on the government or the manufacturer to tell him.

Undoubtedly, physicians are swamped by excessive numbers of drugs in some therapeutic categories. And I am well aware that many drugs within such categories could be eliminated without any loss, or perhaps even some profit, to the practice of medicine. But, in my opinion, neither the FDA nor any other single group has the expertise and the wisdom necessary to determine the one "drug of choice" in all areas of medical practice.

Maker of Medicine

Kenneth G. Kohlstaedt, M.D.,
Vice President,
Medical Research,
Eli Lilly and Company



In my opinion, it is not the function of any government or private regulatory agency to designate a "drug of choice." This determination should be made by the physician after he has received full information on the properties of a drug, and then it will be based on his experience with this drug and his knowledge of the individual patient who is seeking treatment.

If an evaluation of comparative efficacy were to be made, particularly by government, at the time a new drug is being approved for marketing, it would be a great disservice to medicine and thus to the patient—the consumer. For example, when a new therapeutic agent is introduced, on the basis of limited knowledge, it may be considered to be more potent, more effective, or safer than products already on the market. Conceivably, at this time the new drug could be labeled "the drug of choice." But as additional clinical experience is accumulated, new evidence may become available. Later, it may be apparent

that the established products should not be so easily dismissed.

Variation in patient response to drugs constitutes one of the major obstacles to the determination of "drugs of choice." We are just beginning to open the door on pharmacogenetics, but it is evident that genetic differences cause wide variations in the way drugs are absorbed, metabolized, etc. This fact alone is sufficient to make unrealistic the idea that there is one drug in each class to be used for every human being.

The problem of determining relative drug efficacy is an extremely complicated one. Comparison with other drugs of the same class should not be a prerequisite for marketing a new substance. In some therapeutic areas, it may be difficult to make accurate comparisons. For example, in the treatment of infections it is not possible to conduct crossover studies. Recovery may be influenced by factors which cannot be controlled or measured, i.e., natural host resistance and virulence of infective agents. A drug's acceptability must often be judged on the basis of its own performance, and this may be limited to experience in a relatively small patient population. If the introduction of a new drug must await the adequate establishment of relative efficacy, the duration of clinical trial and extent of studies would be greatly prolonged, particularly for rare or unusual conditions. The availability of a new drug would be delayed. Many patients might suffer needlessly and lives might be lost.

Relative efficacy can best be established by experience in a general patient population through regular channels of clinical practice. The physician considers the patient as a whole, which means the patient often has multiple problems and drugs must be selected with this in mind. Hence, a "drug of choice" in an uncomplicated case may not be the best drug for a patient with associated problems. Publication of well-controlled studies in medical journals may provide comparative evidence; discussions at medical meetings, presentations at postgraduate courses, and the new audiovisual technology may bring evidence to physicians on comparative therapy. In a free medical marketplace, a drug that does not measure up will fall into disuse. For example, broad clinical experience has established vitamin B₁₂ as the "drug of choice" for the treatment of primary pernicious anemia. No amount of advertising or promotional effort by the manufacturer could increase the use of liver extract for this anemia. How-

ever, a physician may wish to employ parenteral liver preparations for a special purpose.

In the field of surgery, peer review in the hospital has brought significant improvement in the use of new techniques and procedures. Something of this nature would be useful in the area of drug therapy. However, it should be developed by the medical profession itself and would necessitate, for its proper function, an improvement in the dissemination of reliable data on clinical pharmacology of drugs under consideration.

Ideally, information on the relative efficacy of drugs should be gathered and assessed by the physicians who actually administer the specific agents to a specific patient population. To do this, they will need even more information on the drugs they use—information that the pharmaceutical manufacturers must begin to provide if government regulation of "drugs of choice" is to be avoided.

Opinion & Dialogue

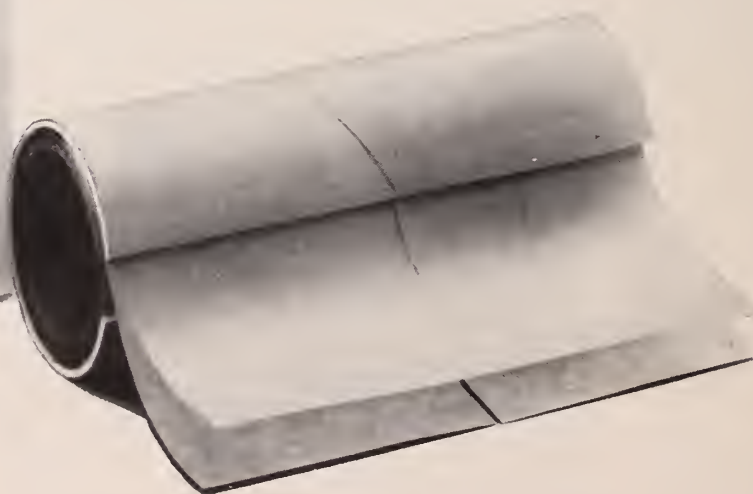
What is your opinion, doctor?

Send us your comments on the above issue.



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Now Let's Try Unity

FACED WITH THE hard reality that bureaucrats care only for programs, not people, the Kingfisher County Medical Society recently sponsored an informal forum discussion for local physicians. Physicians from four counties met at dinner and discussed new ways to react to the general deterioration in relations with various agencies.

The consensus was that human freedoms have already been lost, and that a new stance is mandatory. Although we did not chart any definitive course, our sharing of concerns and frustrations was comforting, and we scheduled two later meetings.

To enlarge participation, the two later meetings convened in other cities; the last was sponsored by the Canadian County Medical Society. The discussions have been incisive, thought-provoking, and very educational. The courses of action suggested have been variable; but nearly everyone agrees that a new activism is obligatory if we are to remain free professionals.

We concluded that the most potent weapon we have is the refusal to accept assignments. Much of the tension in patient relationships results from the interposition of the agency and the patient-physician relation. Assignment refusal restores the personal contract and dispels distrust of treatment needs and fee levels. The financial cost is picayune compared to the freedom gained and most patients can recover much of their costs from the agency if they present bills or receipts.

Partly as a result of these forums, the Kingfisher County Medical Society unanimously united in a public announcement of assignment refusal in April, 1972. The Society bought space in all county newspapers to present this message:

"Because of a continuous increase in government rules that hinder good medical care, the members of the Kingfisher County Medical Society have joined in a decision not to take assignments from Medicare, Welfare, or Medicaid. That is, we will not send bills or claims to these agencies. We shall continue to do our best to provide necessary medical service to everyone, but we believe

that people should deal directly with the agency for their benefits. We know that a personal understanding of both parties' responsibilities is needed for dignified, quality medical care, and we will be glad to explain our position to any interested patient."

Happily, the public reaction to this announcement has thus far been positive, and it is our firm resolve that medical needs will be met. But we also firmly insist that any fees paid for this type of care come through the hands of the patient.

In May, the OSMA House of Delegates passed a resolution encouraging physicians to refuse assignments. Our experience here confirms their wisdom; a medical profession united in assignment refusal will then have an opportunity to restore quality, dignified medical care to all patients. The agency must be a patient resource instead of a guardian of the patient.

Discussions have revealed other needs. The fellowship and renewed acquaintance of our colleagues is a necessity. Our need to strengthen and use the OSMA has been emphasized. But we have also deduced that a significant part of the task before us must be done locally. The general public must become aware of the loss of freedoms through government intervention in medical care. Public pressure on the political process will then result in constructive changes. Our experience has underscored a need for congenial relations with the press; physicians should visit with the local journalists. Positive, constructive programs dealing with area health problems should be advanced.

It seems desirable that our new-found unity be spread everywhere. We hope to share these ideas by direct extension of our discussion group invitations to adjacent areas. We hope that other concerned physicians will start similar forum discussions on problems in their own area, and unite in refusing assignment. □

Ray V. McIntyre, MD



The American Medical Association is alive and well in Chicago.

The reports of its demise, like that of Mark Twain, are quite premature. AMA is a highly democratic functioning organization performing vast amounts of good for

the people and the physicians of the United States of America.

Each year there are presented to the OSMA House of Delegates, and defeated, several resolutions suggesting that we discontinue compulsory AMA membership for OSMA members. These resolutions are prepared by two groups:

a. the ultra conservatives, who feel that AMA is not militant enough in protecting the freedoms of American physicians and medicine.

b. the ultra liberals who feel that the AMA is a bunch of old moss-backs who are not deeply enough committed to solving socio-quasi medical problems.

Both groups are wrong in my opinion.

I am usually against anything that is compulsory for physicians, since, gentlemen, our compulsive character traits are deeply engrained by the rigors of medical training, and are responsible in part for the excellence of American Medicine. In the case of AMA membership, however, it would seem a bad time to water down the powers of the most widely representative organization of physicians in America. The external pressures on medicine by the government and the liberal press are too great to damage in any way this organization that has been the backbone of American medicine for 125 years. Some states have ended compulsory membership and membership has dropped a few thousand, so imagine the glee of the liberal establishment in announcing that AMA is dead.

When I was a freshman medical student,

President Truman was re-elected president on the promise of socializing medicine in America. The fact that I have practiced private medicine for fifteen years is due almost totally to efforts of AMA.

In opposing Medicare, the AMA lost the battle but gained for physicians a better agreement than the American Hospital Association which embraced Medicare and has long since regretted it. Even in losing there was not a total defeat.

The many splinter groups that are springing up to represent smaller numbers of physicians are mostly critical of the AMA stand on socio-economic problems of medicine. I approve of most of the groups, which represent a grass-roots movement on the part of physicians. When their position becomes accepted widely enough it will be enacted by the AMA. The AMA operates on a purely democratic basis with majority rule. At times the U.S. Government seems to have forgotten majority rule in favor of the potentially unworkable theory of minority rule. Even though I would often disagree with activities of the U. S. Government, it does not mean that we should abolish it and not have any government at all. At least one distinction between civilized and uncivilized people is that civilization requires a stable organization that is widely supported by its constituents. One of the tragedies of our period in history is the tendency to form splinter groups and divide our power, like General Custer splitting the 7th Cavalry, a mistake we do not want to make especially while under enemy fire.

A frequent question asked by physicians is, "Yeah, but what has the AMA done for me lately?" An excellent answer is published in a report by Doctor Ernest B. Howard, Executive Vice-President of AMA in JAMA 221:486, July 31, 1972. This report is a presentation of the incredible number of functions performed daily by the AMA for physicians and for the people of our country. It is recommended reading for those having reservations about their AMA membership. □

S.R. McCampbell, M.D.

Primary Hyperparathyroidism

A Study of Nineteen Cases and A Radiographic Follow-Up

WILLIAM D. SMITH, MD

Primary hyperparathyroidism is a disease which may present to almost any physician because of the multiple clinical manifestations associated with hypercalcemia.

OSTEITIS FIBROSA cystica generalisata is the bone disease associated with primary hyperparathyroidism. It was first described in 1891 by Von Recklinghausen. In 1903 Askanazy found a parathyroid adenoma in a patient dying with this bone disease, but believed the parathyroid tumor to be secondary rather than casual. Mandl, in 1925, removed a parathyroid tumor from a patient with osteitis fibrosa cystica with resultant improvement and the relationship was thus established.

Overactivity of the parathyroid glands may exist in primary, secondary, and ter-

tiary forms. In the primary form there is autonomous glandular hyperactivity for unknown reasons. The secondary form is characterized by an excess of parathyroid hormone as a compensatory phenomenon where low serum calcium levels occur, such as malabsorption states and chronic renal failure. In a more recently described entity, "tertiary hyperparathyroidism,"¹¹ patients develop parathyroid adenomata causing hypercalcemia during the compensatory or secondary form.

Primary hyperparathyroidism is being diagnosed with increasing frequency because of more thorough understanding of clinical and laboratory manifestations of the disease as well as the performance of routine biochemical testing in asymptomatic patients. Although patients seen early in the course of the disease may be totally asymptomatic, it is a disease of protean manifestations and one or more body systems is usually involved. Patterns of familial involvement have been recognized,¹⁰ though this is not the usual case, and the association with multiple endocrine adenomata has been described. Approximately 90 percent of all cases of primary hyperparathyroidism are

due to parathyroid adenomas. Hyperplasia accounts for about eight percent and carcinoma comprises less than two percent of all cases.⁵ All of these varieties give rise to similar clinical pictures.

The overproduction of parathyroid hormone leads to a rise in blood calcium, an increased excretion of calcium and phosphate in the urine and a decrease in blood phosphate. The classic triad of the disease is hypercalcemia, hypophosphatemia and hypercalcuria. These serum and urine changes are effected by the calcium mobilizing properties and the phosphaturic activity of parathyroid hormone.⁸ The hormone increases osteoclastic activity which results in the release of calcium into the serum. It also increases renal tubular absorption of calcium and increases distal tubular secretion of phosphates. Hypercalcuria occurs, despite the increased tubular absorption of calcium, because the increase in filtered load of calcium outweighs the increased tubular absorption. Gastrointestinal absorption of calcium is accelerated in primary hyperparathyroidism.

CLINICAL PICTURE

The hypercalcemia present in primary hyperparathyroidism can give rise to a variety of clinical signs and symptoms. These include anorexia, lethargy and fatigue. Because of reduced neuromuscular excitability, weakness and hypotonicity of skeletal muscles may occur. Mental symptoms vary and include nervousness, irritability, loss of mental acuity and psychosis. Gastrointestinal symptoms of dyspepsia, nausea, and constipation are attributed to decreased tone of the intestinal tract.⁶ Peptic ulcer is reported in about 10 percent of patients. Elevated serum calcium is postulated to increase gastric acid and pepsin secretion³ as well as to depress mucosal protective factors.¹³ There is also an increased incidence of pancreatitis and cholelithiasis in the disease entity. The main renal effects are the formation of calculi and subsequent obstruction and infection. This is a result of precipitation of calcium salts in the urine. There may also be precipitation of calcium in the renal paren-

chyma. Polyuria is usually associated with hypercalcuria.

Skeletal changes can be offset by a high dietary calcium intake which can keep pace with the excess calcium excretion. In early stages of the disease skeletal changes are often not present or at least not recognizable. When present, osteitis fibrosa cystica is characterized by bone destruction. There is disorganized arrangement of trabeculae, generalized decalcification, and cystic changes of the skull and long bones. It is separable from other metabolic bone diseases in that there is no failure of matrix formation (as in osteoporosis) and no failure of matrix calcification (as in osteomalacia).⁴ The bone changes are best seen in the hands, feet, jaw, skull, and ends of long bones. In the hands there is decalcification and subperiosteal bone resorption, especially in the middle phalanges, and resorption of the tufts of the terminal phalanges is common. In the skull there is indistinct separation of the inner and outer tables. The teeth are not decalcified but there is often resorption of the lamina dura, which is the cortex of the jaw around the tooth. This is often an early radiologic sign. Bone swelling and cyst formation are referred to as "osteoclastomas" or "brown tumors" and frequently lead to pathologic fractures. Microscopically, as the name implies, there is an abundance of proliferating fibroblastic tissue that replaces the bone that disappears. There is an increase in number of osteoclasts present. Weakening of the bone structure leads to multiple infarctions and in turn hemorrhage. Old blood pigment and aggregates of giant cells are found. The constant attempt at repair results in deposition of new bone over old with resultant prominent osteoid seams lining the spicules.¹ A row of active osteoblasts is often found along the osteoid seams. According to Ascenzi,² the osteoclasts secrete a substance that dissolves the bone matrix. It is unknown whether the fibrous reaction is a direct response to hemorrhage or some other factor.

William D. Smith, MD, was graduated from the University of Oklahoma College of Medicine in 1967, where he is presently taking his third-year orthopaedic surgery residency.

The diagnosis of primary hyperparathyroidism ultimately depends on biochemical tests. There are many elaborate tests but the elevation of serum calcium is the *sine qua non* for the diagnosis. Repeated determinations often must be made to detect the elevation. On the other hand the finding should be reproducible. Since serum calcium values are affected by renal disease and serum protein fluctuations, it is imperative that these abnormalities be taken into consideration when interpreting the serum calcium. Normally about 40 percent of serum calcium is bound to plasma albumin. In hypoproteinemic states less calcium is bound and more of the ionized (active) form is available. Thus a hypercalcemic state may exist with a normal serum calcium. One can readily see that a persistently normal serum calcium could exist in a patient with hyperparathyroidism.¹⁴ Hypercalcemia combined with the signs and symptoms of hyperparathyroidism usually leads to the diagnosis but in an asymptomatic patient the diagnosis is made by exclusion. Other conditions associated with hypercalcemia are multiple myeloma, hyperthyroidism, milk-alkali syndrome, vitamin D intoxication, states of immobilization, and occult malignancy. Myeloma and thyroid disease can be readily differentiated by clinical testing. History should exclude milk-alkali syndrome, hypervitaminosis D and recent immobilization. The hypercalcemia of sarcoidosis is relieved by corticosteroid therapy. It is sometimes impossible to differentiate hyperparathyroidism from occult malignancy complicated by hypercalcemia. The administration of hydrocortisone will relieve the hypercalcemia of most malignant conditions.¹² The same regimen will not affect the hypercalcemia of hyperparathyroidism. X-rays may be of value in differentiating the two. Reiss states that with normal history, physical, laboratory data and x-ray studies (including IVP and GI workups) and with steroids failing to decrease the serum calcium, primary hyperparathyroidism can be assumed to be present.⁹ Low serum phosphate when accompanied by hypercalcemia is a quite helpful guide to the diagnosis but it is often normal. An elevation of alkaline phosphatase,

a result of increased osteoblastic activity, is often seen and seems to be related to the severity of skeletal involvement. However, it may be normal with early x-ray evidence of osteitis fibrosa cystica. Twenty-four hour quantitative urine calcium and phosphate determinations, if increased, may be of diagnostic value but false negatives are common. Phosphate deprivation, calcium infusion and parathyroid hormone infusion tests may be of interest but are of low specificity and are not within the scope of this discussion. The assay of parathyroid hormone is not available in most clinical settings.

Once the diagnosis is established, the treatment is surgical. Following the removal of the hyperfunctioning parathyroid tissue, the serum calcium usually returns to normal or even subnormal. Some degree of tetany is common but this is most often self-limited because the remaining parathyroid tissue will regain its function within a few weeks. Excessive administration of calcium and vitamin D will delay this return to normal.⁹ However, in advanced bone disease, hypocalcemia may be a result of rapid uptake by depleted bones. This is referred to as "bone-hunger tetany" and is an indication for vigorous therapy. Postoperatively the hypercalcemic symptoms commonly disappear within 24 hours; the formation of renal calculi usually ceases and remineralization of the skeleton reportedly occurs rapidly.⁷

CASE MATERIAL

A study of the records of nineteen patients with surgically proven primary hyperparathyroidism treated at Baptist, St. Anthony's and Presbyterian Hospitals, Oklahoma City, Oklahoma from 1966 to 1971 was performed. (Table I) There were twelve females and seven males, which is considerably lower than the usual ratio of three or four females to one male. The age of these patients varied from twenty-three to seventy-two. (Table II) It is significant to note that thirteen or 68% were between the ages of fifty and sixty-six.

A summary of the presenting or chief complaints of the patients is listed in Table III. Seven (37%) presented with skeletal symptoms. Four of these complained of bone

TABLE I

Patient	Age	Sex	Presenting Complaint	Secondary Symptoms	Serum Calcium	Serum Phosphate	Alkaline Phosphatase	24-hr. Urinary Calcium	24-hr. Urinary Phosphate
1. S. M.	61	F	Hip pain	None	Elevated	Depressed	Normal	Not performed	Not performed
2. V. P.	58	F	None (routine exam)	None	Elevated	Depressed	Normal	Not performed	Not performed
3. J. T.	72	M	Seizure	Abdominal pain; nausea & vomiting	Elevated	Depressed	Elevated	Depressed	Not performed
4. C. F.	59	F	Multiple renal stones	Fingertip pain	Elevated	Not performed	Elevated	Elevated	Not performed
5. V. P.	60	F	Hand swelling	Bone pain; Weakness; N&V; past cholecystitis and pancreatitis	Elevated	Normal	Elevated	Elevated	Not performed
6. M. P.	62	F	Psychosis	Occasional back pain	Elevated	Depressed	Elevated	Normal	Normal
7. P. P.	23	F	Hip & knee pain	Weakness and Vomiting	Elevated	Normal	Elevated	Normal	Not performed
8. E. N.	66	M	Weight loss	Weakness and Vomiting	Elevated	Not performed	Elevated	Not performed	Not performed
9. J. M.	58	M	Renal stone	None	Elevated	Depressed	Normal	Elevated	Elevated
10. B. A.	43	F	Fractured femur	Nausea & vomiting; past cholecystitis	Elevated	Normal	Elevated	Elevated	Not performed
11. R. G.	39	M	Renal stones	None	Elevated	Depressed	Normal	Normal	Normal
12. C. F.	50	F	Weakness	Bone pain; Nausea & vomiting	Elevated	Depressed	Elevated	Elevated	Not performed
13. I. W.	58	F	Fatigue	Weight loss; past cholecystitis	Elevated	Depressed	Normal	Elevated	Not performed
14. J. B.	66	M	Foot pain	Ulcer symptoms; past renal stones	Elevated	Elevated	Elevated	Elevated	Elevated
15. P. M.	65	F	Bone pain	Indigestion; past renal stones	Elevated	Depressed	Elevated	Not performed	Not performed
16. C. H.	26	F	Depression	Decreased mental acuity	Elevated	Depressed	Normal	Not performed	Not performed
17. R. T.	60	M	Renal stones	None	Elevated	Depressed	Not performed	Elevated	Not performed
18. V. D.	66	M	Renal stones	Past ulcers	Elevated	Depressed	Normal	Normal	Not performed
19. E. W.	48	F	Fractured femur	Polydipsia	Elevated	Depressed	Elevated	Not performed	Not performed

TABLE I (Continued)

Biopsy of Bone Lesion	Parathyroid Diagnosis	Radiographic Findings	Radiographic Follow-up
Clavicle—osteitis fibrosa cystica generalisata	Adenoma	1. Diffuse demineralization 2. Subperiosteal resorption of phalanges 3. Decreased lamina dura 4. IVP—renal stone	Nine months postoperative: 1. Remineralization 2. Reversal of hand changes
None	Adenoma	1. Negative bone survey	
None	Adenoma	1. Negative hand films 2. Renal stone	
None	Adenoma	1. Diffuse demineralization	Eighteen months postoperative: Remineralization
Metacarpal—Osteitis fibrosa cystica generalisata	Adenoma	1. Diffuse demineralization 2. Subperiosteal resorption of phalanges 3. Metacarpal cyst 4. IVP—renal stone	Three years, five months post-operative: 1. Remineralization 2. Reversal of hand changes with healing of cyst
None	Adenoma	1. Diffuse demineralization 2. Absent lamina dura 3. Nephrocalcinosis	One year, nine months post-operative: 1. Remineralization
None	Adenoma	1. Diffuse demineralization 2. Subperiosteal resorption of phalanges 3. Cysts—multiple 4. Absent lamina dura	Six months postoperative: 1. Remineralization 2. Healing of cysts
None	Adenoma	1. Cystic lesions of hands 2. Pathologic fractures of rib and humerus 3. Nephrocalcinosis	Deceased
None	Adenoma	1. Normal hand films 2. Bilateral renal stones	
Femur—"benign fibro-osseous lesion"	Adenoma	1. Diffuse demineralization 2. Multiple cysts 3. Pathologic fractures of both femurs 4. Renal stones	Deceased
None	Adenoma (Found on second exploration)	1. Normal hand films 2. Absent lamina dura	Lost to follow-up
None	Adenoma	1. Normal hand films 2. Normal dental films	
None	Adenoma	1. Normal hand films 2. Bilateral renal stones	
Femur—osteitis fibrosa cystica generalisata	Adenoma	1. Diffuse demineralization 2. Multiple cyst formation 3. Soft tissue calcification of foot	Deceased
None	Adenoma	1. Diffuse demineralization	Lost to follow-up
None	Adenoma	1. Normal hand films 2. Normal dental films	
None	Hyperplasia	1. Normal hand films 2. Normal dental films	
None	Adenoma	1. Normal hand films 2. Normal dental films 3. Renal stone	
Femur—osteitis fibrosa cystica generalisata	Adenoma	1. Diffuse demineralization 2. Subperiosteal resorption of phalanges 3. Pathologic fracture of femur 4. Normal dental films	Two months postoperative: Early healing of fracture

TABLE II

AGE OF 19 PATIENTS WITH SURGICALLY PROVEN
PRIMARY HYPERPARATHYROIDISM

Years	Number of Patients
20-29	2
30-39	1
40-49	2
50-59	5
60-69	8
70-79	1

pain; one had a mass on the dorsum of her hand, and two had pathologic fractures of the femur. Five (26%) presented with renal stones. Two (11%) presented strictly as psychiatric patients (depression and psychosis). Three (16%) complained of a more generalized problem (weakness, fatigue and weight loss). One patient presented to a neurologist because of major motor seizure, and a single patient was totally asymptomatic and was diagnosed during her yearly checkup which included a serum calcium determination.

Most patients had multiple secondary symptoms. Table IV presents a summary of all the complaints mentioned. Ten (55%) had significant abdominal distress. Seven mentioned nausea and vomiting, and a past history of proven cholecystitis, ulcer disease, and pancreatitis existed in three, two and one patients respectively. Two patients gave skeletal symptoms as a secondary or past problem for a total of nine (47%). Seven (37%) had present or past symptoms related to renal stones. Weakness, fatigue or tiredness was mentioned by five (26%) of the patients.

TABLE III

PRESENTING COMPLAINT OF 19 PATIENTS WITH
SURGICALLY PROVEN PRIMARY
HYPERPARATHYROIDISM

Complaint	Number of Patients	Percentage
Orthopedic	7	37%
Urologic	5	26%
Psychiatric	2	11%
Generalized	3	16%
Neurologic	1	5%
Asymptomatic	1	5%
		100%

TABLE IV

SUMMARY OF COMPLAINTS OF 19 PATIENTS WITH
SURGICALLY PROVEN PRIMARY HYPERPARA-
THYROIDISM IN DECREASING ORDER OF
FREQUENCY

Symptom	Number of Patients	Percentage
Abdominal distress (including nausea and vomiting)	10	55%
Skeletal symptoms	9	47%
Urinary calculi	7	37%
Weakness or fatigue	5	26%
Anxiety of similar symptoms	3	16%

The serum calcium was elevated in all nineteen patients (100%). The serum phosphate was found to be low in thirteen (77%) of seventeen patients in which the study was performed. The alkaline phosphatase was elevated in eleven (61%) of eighteen patients tested. Nine of those eleven had demonstrable x-ray evidence of bone disease, which will be mentioned subsequently. Twenty-four hour urinary calcium determinations were performed in fourteen cases and were elevated in eight (58%). Twenty-four hour urinary phosphate value was elevated in two of four patients tested.

Seven patients, otherwise asymptomatic, were found to have renal calculi or nephrocalcinosis by x-ray. A total of fourteen patients (74%), therefore, had renal stones clinically and/or by x-ray.

Eleven patients (60%) had radiographic evidence of bone disease. Ten of these showed evidence of demineralization or subperiosteal resorption of bone. Six had cyst formation present by x-ray; three had pathologic fractures and one had extra-osseous soft tissue calcification. Resorption of the lamina dura was noted in four of nine patients in which dental films were taken. The four with normal dental films correlated in every case but one with the remainder of a negative bone survey. It is worthy of note that thirteen (68%) patients had radiographic evidence of bone disease and/or elevated alkaline phosphatase.

A biopsy of a specific bone lesion was performed for diagnostic purposes in five patients. In four the diagnosis was osteitis fibrosa cystica. In the other the diagnosis of "benign fibrous lesion" was advanced.

The surgical findings at neck exploration

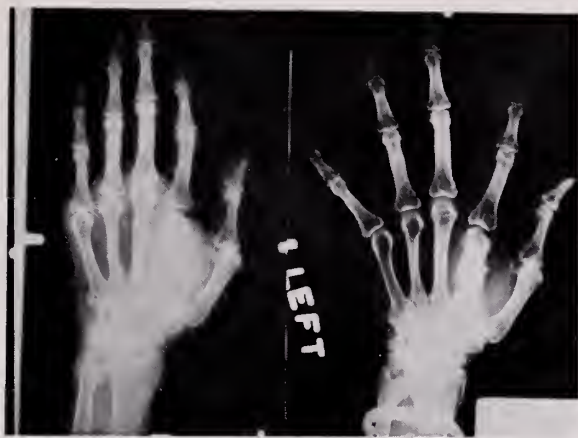


FIG. 1-A (left)

Case 5: Sixty-year-old white female with a tender mass on the dorsum of her hand. Serum calcium and alkaline phosphatase values were elevated. In addition to the large cyst, demineralization and subperiosteal resorption of the phalanges can be seen.

FIG. 1-B (right)

Case 5: Same hand three years and five months following removal of a parathyroid adenoma.

revealed eighteen cases (95%) of parathyroid adenoma and one case of benign hyperplasia. The serum calcium values returned to normal in the early postoperative period in every case but one. This patient later required re-exploration of the neck and a second adenoma in the retroesophageal area was found.

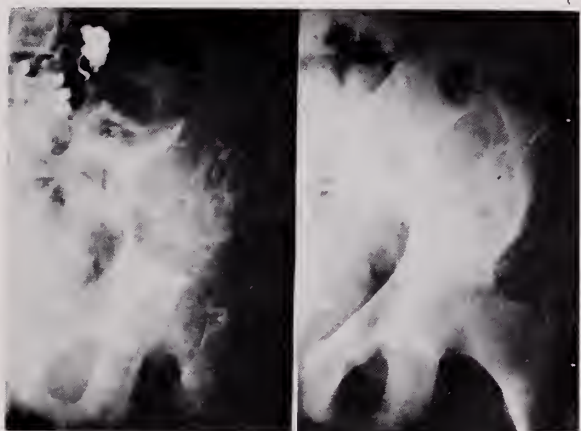


FIG. 2-A (left)

Case 7: Twenty-three-year-old white female with left hip and knee pain. Serum calcium and alkaline phosphatase values were elevated. Cyst formation is seen in the left iliac wing.

FIG. 2-B (right)

Case 7: Six months following removal of a parathyroid adenoma remineralization and cyst healing are seen.



FIG. 3-A (left)

Case 19: Forty-eight-year-old white female who sustained a fractured femur with minimal trauma. Serum calcium and alkaline phosphatase values were elevated.

FIG. 3-B (right)

Case 19: Lateral view. Note the cystic lesion at the fracture site.

RADIOGRAPHIC FOLLOW-UP

A radiographic follow-up was performed on the patients with x-ray evidence of bone disease. Three who had had extensive osseous lesions were deceased. Two could not be located. Six were examined radiographically with the follow-up period ranging from two months to three years and five months. (Cases 1, 4, 5, 6, 7 and 19). In every case remineralization was present and in those cases where subperiosteal resorption existed preoperatively, this was reversed. Cystic lesions likewise showed evidence of healing, and a pathologic fracture of the femur showed remarkable early repair two months postoperatively. (case 19).

CASE REPORTS

Case 5: V.P., a sixty-year-old white female presented with a slowly enlarging mass on the dorsum of her left hand. Secondary complaints included diffuse bone pain, weakness, and occasional nausea and vomiting. She had a past history of pancreatitis and cholecystitis. Her admitting physical examination revealed a 3 x 4 cm. bony-hard mass overlying the second metacarpal dorsally. Her serum calcium, 24-hour urinary calcium, and alkaline phosphatase values were ele-



FIG. 4-A (left)

Case 19: Radiograph showing reduction, fixation and early healing two months following removal of parathyroid adenoma.

FIG. 4-B (right)
Case 19: Lateral view.

vated. The serum phosphate was normal. Radiographic bone survey revealed diffuse demineralization. X-rays of the hands showed subperiosteal resorption and a large cyst of the second metacarpal. (Fig. 1A) A renal stone was found on IVP. Biopsy of the metacarpal lesion was performed and the cyst walls were collapsed. The pathologic diagnosis was osteitis fibrosa cystica. The patient underwent neck exploration and excision of a parathyroid adenoma. Her postoperative serum calcium promptly returned to normal and her secondary symptoms soon subsided. Figure 1B depicts her left hand three years and five months following removal of the parathyroid adenoma.

Case 7: P.P., a twenty-three-year-old white female presented with left hip and knee pain. Secondary symptoms of weakness and intermittent vomiting had been present. Past history and physical findings were unremarkable. Her serum calcium and alkaline phosphatase values were elevated and the serum phosphate was depressed. Twenty-four hour urinary calcium was normal. Radiographic bone survey revealed demineralization of the skull and distal clavicles, subperiosteal resorption of the phalanges and cyst formation in the iliac wings. (Fig. 2A) Dental films revealed absent lamina dura. Neck exploration revealed a parathyroid adenoma. Her postoperative course was benign and she had rapid cessation of

the weakness and vomiting as well as return of serum calcium to normal. Figure 2B depicts her ilium six months postoperatively.

Case 19: E.W., a forty-eight-year-old white female presented with a pathologic fracture of her left femur. Secondary complaints included polydipsia. Physical exam was negative except for the fracture deformity. Serum calcium and alkaline phosphatase values were elevated and serum phosphorous was low. Radiographic bone survey revealed diffuse demineralization, subperiosteal resorption of the phalanges and a fracture through a large cystic lesion in the distal left femur. (Figs. 3A and 3B) Dental films revealed normal lamina dura. Biopsy of the femoral lesion was performed with simultaneous reduction and internal fixation of the fracture. The pathologic diagnosis was osteitis fibrosa cystica. Neck exploration a few days later revealed a parathyroid adenoma. Postoperatively the serum calcium returned to normal. Figures 4A and 4B reveal the reduction and early healing two months postoperatively.

SUMMARY

Primary hyperparathyroidism may exist in a variety of clinical forms. Its skeletal manifestation is osteitis fibrosa cystica.

Repeated calcium determinations should be performed in patients with unexplained skeletal pain, renal stones, chronic gastrointestinal disorders and vague general symptoms. The diagnosis involves differentiating between the other diseases that can give rise to hypercalcemia.

A retrospective study of nineteen patients was performed with respect to age, sex, symptomatology, laboratory and radiographic studies. A prompt return of serum calcium to normal occurred following surgical removal of the abnormal parathyroid tissue. In addition, radiographic improvement of bone abnormalities was demonstrated. □

ACKNOWLEDGEMENT

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Rural Mental Health Care: A Fourth Year Report

ROBERT E. L. JOHNSON, JR., DR, PH
WILLIAM F. GANDY, AB, BD, ThM

Rural mental health care frequently lacks depth and breadth but the Bi-State Mental Health Foundation is proof positive that quality programming is possible in a non-metropolitan area.

INTRODUCTION

THE BI-STATE Mental Health Foundation, Ponca City, Oklahoma is a private, non-profit mental health organization which is financed through local, state and federal funds to serve a seven county catchment area (six counties in Oklahoma and one in Kansas) with a population base of approximately 175,000 persons. Through direct service, cooperation and collaboration with existing agencies, the five essential comprehensive mental health services are augmented by 48 professionals and 56 nonprofessionals. The scope of the Foundation's activities include: In and out patient psychiatry; speech and hearing services; school guidance and consultation, mental health education, teacher inservice training; a halfway house for alcoholics; consultation to minority groups; pas-

toral counseling and consultation; community planning and development; consultation to Boards of Education, welfare associations, the courts as well as paraprofessional and professional student training programs with a local college and two local universities.

HISTORY AND BACKGROUND

In 1956 a group of interested citizens formed a coalition to advocate the mental health needs of Kay County Oklahoma school children, which evolved into a local mental health association, culminating in the spring of 1958, with the opening of the Kay County Guidance Center. Coincidental with this guidance center's beginning operation, was a thrust toward community intervention and involvement (ie, schools, courts, churches and civic groups) which provided a growing awareness of community interests, needs and resources.

Originally the staff was composed of a part-time psychiatrist, psychologist, and a full-time social worker. Program expansion characterized the early development of the Kay Guidance Center and eight professional staff members were employed to perform services from 1959-1965. In 1966, an ESEA Title III grant was awarded which extended the provision of school services (ie, inservice sex education, teacher training programs, and guidance services to students).

Further, this grant aided in the establishment of a speech and hearing department which quickly developed an outreach capability. In 1968, under the provisions of Public Law 88-164, a comprehensive mental health center was established and the full complement of in and out patient services (*ie*, five essential services) was operationalized by July, 1968. Since that time the "55 and Older Club" for senior citizens, "Halfway House" for alcoholics, "White Eagle Development Association" for Ponca Indians and community planning and development services have been added, thus fulfilling the 1968 projected foundation development, which boasts a 104 member staff.

DIMENSIONS OF SERVICE DELIVERY

A comprehensive mental health center's effectiveness is contingent on the accessibility, continuity, quality and efficiency of care provided to its clients. Although the Foundation's four year maturation must be considered in an overview of its performance, significant achievements are recognizable throughout the service delivery system.

A multi-county operation of outpatient clinics, school and speech and hearing services typifies the aggressive outreach and

staff mobility of this organization, and the near thirty-seven percent (1,393 to 3,791) increase in recipients of outpatient services from 1969 to present demonstrates the communities' acceptance and the accessibility of its decentralized operations. Continuity of care, however, is not sacrificed by decentralization as a triage is utilized to assure patient flow from outreach operations to specialized service centers made up of multidisciplinary teams who carefully coordinate their patient care efforts. This continuity may be demonstrated by noting that through screening tests given within the area schools, children are referred to a learning disabilities team, who upon study completion, coordinate treatment programs involving the interpretation of findings to parents and teachers by the referring school service representative, as well as the counselor and/or speech and hearing pathologist assigned to assist the family in problem resolution.

It is estimated that during the current school year, more than 150 children will be evaluated for learning disabilities. This large case volume is made possible by the diligent efforts of a highly efficient and dedicated nine member team composed of a psychiatrist, school counselors, speech and hearing pathologists, social workers and secretaries whose work interest makes their time consuming duties appear to be an avocation. Furthermore, efficiency of foundation operations has been achieved when equitable financing and adequate staff compensation are considered, and with recent organizational changes from a disciplinary to a functional model of service, overall program administration will be simplified.

DISCUSSION

This Foundation's quality program is the result of multi-dimensional planning and a service delivery system that carefully brings into balance the promotive, preventive, evaluative and rehabilitative aspects of comprehensive mental health care. Program comprehensiveness is exemplified by a current focus on drug abuse problems which are observed throughout the catchment area. Recently in Ponca City, this center acting as a catalyst, assisted local leaders (*ie*, mayor's committee on drug abuse, civic clubs, law

Robert E. L. Johnson, Jr., DR, PH, was graduated from the School of Health, University of Oklahoma, Department of Human Ecology in 1971. He is now Coordinator of the Bi-State Mental Health Foundation for Northern Oklahoma Colleges. He is a member of the Mental Health Associate Program, the Oklahoma Health and Welfare Association, the American Group Psychotherapy Association and the National Association of Social Workers.

William F. Gandy graduated from the Divinity School, Duke University in 1959 and received his ThM degree in 1963. A Chaplain Supervisor, Mr. Gandy is a member of the Association for Clinical Pastoral Education and the College of Chaplains, American Protestant Hospital Association and the Oklahoma Education Association. He is a member-at-large of the Executive Committee of the College of Chaplains.

enforcement, school and public health officials) in their efforts to mobilize community interest in drug abuse, resulting in the establishment of a kindergarten through twelfth grade educational program utilizing classroom teachers, guest lecturers and audiovisual aids. In addition, a simultaneous effort was successfully made to provide seminars for interested parent and professional groups within the community. Program impact is observable by student, parent and professional interest as well as a decrease of adolescent drug admissions to the inpatient psychiatric service. These highly effective promotive and preventive techniques could not be utilized without the knowledge and assurance that prompt referral and specialized in and out patient treatment services await recipients in need of rehabilitative care. Without fail the referral system from schools, churches, physicians, and community agencies has operated smoothly, thus assuring, when indicated, prompt patient care.

The thoroughness of our approach in deal-

ing with drug problems is typical of what may be observed in all of the center projects, to mention a few, sex education; learning, speech and hearing disability detection and treatment; problems in family living; treatment of alcoholism, psychotic disorders; youth rights and human relations.

SUMMARY

The Bi-State Mental Health Foundation is a comprehensive mental health center which has developed an effective service delivery system for the seven county catchment area that it serves. A broad range of promotive, preventive, evaluative and rehabilitative services are provided which makes it unique among the nation's rural mental health centers. □

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Indicates estrogen excess.

1st choice: Switch to a combination 50-mcg.-estrogen O.C. (such as **Demulen**[®]).

Age 19, small breasts, minor hirsutism, oily hair and skin. History of metrorrhagia, skipped or scanty menses. New user.

Indicates androgenic excess or estrogen deficiency (fertility is suspect).

1st choice: An estrogen-dominant O.C. (such as **Enovid-E**[®]).

Age 25, average frame, poor complexion. No problem with menses, normal para 1. On a low-estrogen/high-progestogen O.C. for two years. Now complains of scanty flow, decreased libido, depression.

Indicates probable buildup of progestogen-related side effects.

1st choice: Switch to a center-spectrum O.C. with more estrogen, less progestational activity (such as **Ovulen**[®]).

Age 21, short, mammosc, with normal menses, some acne. Was put on pre-nuptial regimen of 50-mcg.-estrogen/moderate-progestogen O.C. for two months. Now has increased acne.

Indicates metabolic production of androgen or relative estrogen deficiency.

1st choice: Switch to a 100-mcg.-estrogen combination (such as **Enovid-E**[®] or a sequential).



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Oral contraceptives are complex medications. Among the commonly reported adverse reactions are: intracycle bleeding, fluid retention, tender or swollen breasts, exacerbation of acne condition, changes in libido, amenorrhea while on medication and upon discontinuance, nausea, leg cramps, headaches, weight gain. Therefore, after reference to the prescribing information, oral contraceptives should be prescribed with care.

*Note: In some patients any level of exogenous estrogen or progestogen may produce symptoms of excess hormone activity.

Age 25, tall, slender, athletic, with flat chest. On a progestogen-dominant 50-mcg.-estrogen O.C. Has recurrent trichomoniasis and Monilia.

Indicates estrogen deficiency and excess of progestogen in current O.C.

1st choice: Switch to a combination pill with 100 mcg. estrogen and less progestational activity (such as **Enovid-E**[®] or **Ovulen**[®] or a sequential).

Age 23, "Miss America" figure, previously normal menses, healthy skin and hair. On a 50-mcg.-estrogen pill for four months. Complains of intracyclic bleeding.

Indicates probable need for more estrogen.

1st choice: Switch to a center-spectrum O.C. with more estrogen and moderate progestogen dominance (such as **Ovulen**[®]).

Age 21, college senior, average build. On highly progestogen-dominant/low-dose-estrogen O.C. for six months. Now complains of amenorrhea, between-cycle headaches, weight gain.

Indicates probable progestogen excess.

1st choice: Switch to a center-spectrum pill (such as **Ovulen**[®]).

Age 27, slightly overweight, multiparous. Nausea with all three pregnancies and with a sequential O.C. three years ago. Has premenstrual fluid retention and leg cramps.

Indicates probable excess of estrogen.

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Actions—Ovulen and Demulen act to prevent ovulation by inhibiting the output of gonadotropins from the pituitary gland. Ovulen and Demulen depress the output of both the follicle-stimulating hormone (FSH) and the luteinizing hormone (LH).

Special note—Oral contraceptives have been marketed in the United States since 1960. Reported pregnancy rates vary from product to product. The effectiveness of the sequential products appears to be somewhat lower than that of the combination products. Both types provide almost completely effective contraception.

An increased risk of thromboembolic disease associated with the use of hormonal contraceptives has now been shown in studies conducted in both Great Britain and the United States. Other risks, such as those of elevated blood pressure, liver disease and reduced tolerance to carbohydrates, have not been quantitated with precision.

Long-term administration of both natural and synthetic estrogens in sub-primate animal species in multiples of the human dose increases the frequency of some animal carcinomas. These data cannot be transposed directly to man. The possible carcinogenicity due to the estrogens can be neither affirmed nor refuted at this time. Close clinical surveillance of all women taking oral contraceptives must be continued.

Indication—Ovulen and Demulen are indicated for oral contraception.

Contraindications—Patients with thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia and undiagnosed abnormal genital bleeding.

Warnings—The physician should be alert to the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism and retinal thrombosis). Should any of these occur or be suspected the drug should be discontinued immediately.

Retrospective studies of morbidity and mortality conducted in Great Britain and studies of morbidity in the United States have shown a statistically significant association between thrombophlebitis, pulmonary embolism, and cerebral thrombosis and embolism and the use of oral contraceptives. There have been three principal studies in Britain^{1,2} leading to this conclusion, and one³ in this country. The estimate of the relative risk of thromboembolism in the study by Vessey and Doll¹ was about sevenfold, while Sartwell and associates⁴ in the United States found a relative risk of 4.4, meaning that the users are several times as likely to undergo thromboembolic disease without evident cause as nonusers. The American study also indicated that the risk did not persist after discontinuation of administration and that it was not enhanced by long-continued administration. The American study was not designed to evaluate a difference between products. However, the study suggested that there might be an increased risk of thromboembolic disease in users of sequential products. This risk cannot be quantitated, and further studies to confirm this finding are desirable.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions medication should be withdrawn.

Since the safety of Ovulen and Demulen in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the time of the first missed period.

A small fraction of the hormonal agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect to the nursing infant cannot be determined at this time.

Precautions—The pretreatment and periodic physical examinations should include special reference to the breasts and pelvic organs, including a Papanicolaou smear since estrogens have been known to produce tumors, some of them malignant, in five species of sub-primate animals. Endocrine and possibly liver function tests may be affected by treatment with Ovulen or Demulen. Therefore, if such tests are abnormal in a patient taking Ovulen or Demulen, it is recommended that they be repeated after the drug has been withdrawn for two months. Under the influence of progestogen-estrogen preparations pre-existing uterine fibromyomas may increase in size. Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation. In breakthrough bleeding, and in all cases of irregular bleeding per vaginam, in functional causes should be borne in mind. In undiagnosed bleeding per vaginam adequate diagnostic measures are indicated. Patients with a history of psychic depression should be carefully observed and

the drug discontinued if the depression recurs to a serious degree. Any possible influence of prolonged Ovulen or Demulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. A decrease in glucose tolerance has been observed in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving Ovulen or Demulen therapy. The age of the patient constitutes no absolute limiting factor, although treatment with Ovulen or Demulen may mask the onset of the climacteric. The pathologist should be advised of Ovulen or Demulen therapy when relevant specimens are submitted. Susceptible women may experience an increase in blood pressure following administration of contraceptive steroids.

Adverse reactions observed in patients receiving oral contraceptives—A statistically significant association has been demonstrated between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism and cerebral thrombosis.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement and secretion), change in weight (increase or decrease), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, rash (allergic), rise in blood pressure in susceptible individuals and mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema nodosum, hemorrhagic eruption and itching.

The following laboratory results may be altered by the use of oral contraceptives: hepatic function: increased sulfobromophthalein retention and other tests, coagulation tests: increase in prothrombin, Factors VII, VIII, IX and X, thyroid function: increase in PBI and butanol extractable protein bound iodine, and decrease in T₃ uptake values, metyrapone test and pregnanediol determination.

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You Gotta Have Heart

JENKIN LLOYD JONES

It is a peculiar time in which the American public accepts as never before the scientific skill of MD's and questions as never before their basic humanity.

IN THE FIRST act of the musical comedy, "Damn Yankees," there is a song entitled, "You Gotta Have Heart."

"Heart" in our confused slang can mean either determination or compassion.

The determination of the American medical profession to develop its art and improve its techniques is almost universally admitted. So great is the awe and respect of the general public for the modern science of medicine that your one-time rivals are either fading or joining you.

The naturopaths have faded. Chiropractors seem to be treating a diminishing percentage of the population. Hostetter's Bitters, Peruna and even Hadacol are no longer popular. And the osteopaths have now embarked on a regimen of training that seems to have no quarrel of consequence with medical theory.

In short, the people not only admire medical skills but, thanks to the enthusiastic writing of the science reporters in my profession, they often hold an exaggerated estimate of the medical art. In this respect, your public relations have been marvelous.

But where "heart" may be taken to mean compassion, the public estimation of the medical profession has, in my opinion, slipped backward. The feeling that doctors, in general, are not as kindly as their predecessors, that more and more of them are intent on extracting the maximum profit from their patients is perhaps the chief reason for the pressure in favor of expanded socialized medicine. While your abilities are now almost universally conceded, your good intentions are coming under increasing question.

You all know the famous old painting of the family doctor sitting pensively at the bedside of the sick child. This is still the idealized image of the family doctor. But the trouble with that gentle old practitioner was that sitting was just about the best thing he could do. His bag of tricks was small. His pharmacopoeia of herbs, tinctures and elixirs was generally worthless and, at best, as crude as a mustard plaster and as violent as calomel.

Being of long experience he could, at the moment you let him in the door, smell typhoid fever or diphtheria. But diagnosis

Presented to the Annual Meeting of the Oklahoma State Medical Association, May 20th, 1972, in Oklahoma City.

was not enough and comfort was not enough. Too often at the end of his long vigil he drew the sheet gently over the face of the patient. Yet people loved him.

The doctor of today has a bag of tricks fatter than Santa Claus' sack. Rarely does he sit pensively at the bedside, staring at an acute illness. He summons an ambulance. He alerts the operating room or he orders the oxygen tent made ready. The plasma bottles are rigged or the artificial kidney is wheeled in. From a huge dispensary come syringes and chemicals that would have flabbergasted Paracelsus and delighted Erlich.

The modern doctor is not a bed-sitter. He is a whirlwind of action. He makes things happen—or, better yet, he makes things not happen. For his vaccines and anti-toxins have blotted up the old scourges. The pest houses have vanished. The recurrent malarial ague which our forefathers considered almost as natural as puberty is largely memory. He is doing, in general, a magnificent job, as the actuarial tables of any life insurance company will testify.

Yet, often he is not loved. Why?

First, (it seems to me) he is overworked. He is overworked, primarily, because the appetite for medical services has never been so great.

Because the doctor is overworked he tries to use his time to the best advantage. The house call, generally, is an inefficient method of practicing modern medicine. In the first place, it is impossible for the doctor to put his best tools in a black bag, or even in his car trunk. Secondly, the night house call cuts into the doctor's generally inadequate rest and injures his efficiency the next day.

Furthermore, many house calls are unnecessary. If a man leaped into his clothes and roared out of the driveway every time a panicky young mother had a croupy baby he'd be leaping and roaring most nights of the year. So the doctor argues sincerely and with considerable logic that the patient should come to the office.

The only trouble is that whenever a real emergency fails to get a response the scars

go deep. The husband of an elderly woman friend of mine developed coronary symptoms at five A.M. The sleepy physician suggested over the phone that the patient be given a sedative and show up at the office before noon. Half an hour later the frantic wife held a dead man in her arms. Although her political philosophy is to the right of Benjamin Harrison she is now gung ho for socialized medicine. Not that she would get any better service, but she thinks this would punish doctors.

I believe that in every community above 20,000 population the local medical society should designate physicians on a rotating schedule to handle those night calls which, although they may not be urgent, the caller thinks are urgent. In larger communities such a chore could be handled by young interns and residents. For if medicine is to maintain its humanitarian image it must be prepared, like the fire department, to respond in some way to all alarms, even false ones. In many communities, when the time is inconvenient the medical response is too weak.

The doctor who prefers the office visit to the house call has brother doctors who prefer group medicine to individual practice. Here, again, the logic is excellent. Group or clinical medicine means that a number of doctors are able to join together in the same facility and practice their chosen specialties. All are mutually-supportive. The diagnostic and therapeutic gizmos and gadgets can be far more expensive and elaborate than could ever have been afforded by the old-time doctor with the cabinet of simple instruments in his office over the village drug store.

But the office over the drug store is empty. The nearest clinic could be 50 miles away. There is a sense among the rural people that they have been abandoned. There is fear among them, and anger. Yet the imperative of centralized medical facilities is overwhelming. The question is: How do you get help for the small town patient, or the farm accident victim, or the highway casualty?

Doctor Stanley McCampbell, your incoming president, is determined to wrestle with this problem. He has suggested a series of clinics—one for every two counties, somewhat similar to a rural consolidated school

district. Or perhaps we may have to go to some sort of a helicopter emergency service in which the doctor on emergency call takes the elevator to the helicopter on the hospital roof, is flown at 90 miles an hour direct to the patient, gives emergency treatment on the spot and accompanies the patient back to the hospital. This would be expensive, but subsidizing doctors to man clinics for every two counties would be expensive, too.

But Doctor McCampbell is absolutely right. Something must be done.

Secondly, the medical profession must be more vigilant than it has been in curbing its own racketeers. It has done pretty well in curbing the utter quacks. The state examinations are generally adequate and the requirements for fellowships are usually stiff. But a bloodsucker is a bloodsucker, even if he is also a competent journeyman.

Doctors generally know who the overchargers are in their own communities. They know the guys who sock struggling young married couples on the theory that the parents will stand the gaff. They know the over-eager young surgeons who are searching for a formula for instant Cadillac.

Most medical societies anesthetize their consciences by setting up grievance committees to which irate patients may direct their complaints. But few patients with any pride ever complain. Mostly they pay up eventually and then spend the rest of their lives nursing resentment against the whole profession. It is the silent, but injured patient who is more dangerous to the future of private medicine than the squawker who gets relief or the deadbeat who doesn't pay at all.

Therefore, I was pleased to read in our paper yesterday that Doctor Howard Keith of Shattuck was explaining to this group the not-yet-operable foundation for peer review of charges among OSMA members. It's time this was put into high gear.

I think medical societies should insist, as a membership requirement, on the right to examine charges, taking into consideration the difficulty of the treatment, the amount of time consumed, and the wealth of the patient. And in those cases where charges run consistently out of line there should be some very tough talk, for the boodlers are a menace to the whole group.

It was sad that a few years ago it was the Department of Justice, not the medical profession, that blew the whistle on ophthalmologists who were taking blatant kickbacks from eyeglass lense-grinders.

Equally sad was the testimony, a few years ago, before the Senate Anti-Trust and Monopoly Committee in which the associate general council of the Association of Retail Druggists charged collusion between many doctors and the pharmacies in which they had a financial interest.

There are in America 10,500 doctors who own all or part of a pharmacy in their communities. Most of these investments are innocent ones. Doctors invest their spare cash in many enterprises and it is not remarkable, since they deal in medicines, that they would have a natural affinity for the drug business.

But the possibility of abuse is obvious. And a little abuse can start a big and all-inclusive charge of misconduct. As a matter of self-protection it would seem to me wise if medical societies constantly made spot checks to insure that prescriptions are not written on forms which would tend to direct a patient to a certain prescription shop, and that prices charged by doctor-owned dispensaries are strictly in line.

If medical societies do nothing you can't blame John Q. Public for harboring the impression that doctors collectively cannot or will not protect the patient and that Big Brother in Washington is his only friend. Thus he is softened up for greater government control.

I don't have to tell this audience about the evils of the professional malpractice lawyer, about the fantastic increases in malpractice insurance premiums, about the way many good doctors are grossly penalized for an honest guess that went wrong or for an accident incident to a normally-hazardous operation. Once, on a transatlantic ship, a distinguished professor of medicine from Chicago confided to me that he is so afraid of a malpractice suit that when the cry arises, "Is there a doctor in the audience?" he sits with folded hands. I'd give him "A" for caution and "F" for moral courage.

Yet, in spite of the fact that fraudulent or exaggerated malpractice actions are a hazard facing every doctor, it is no particu-

lar credit to the profession that expert defense testimony can be instantly summoned by the MD who has lurched in to do emergency brain surgery with five Martinis aboard.

Defense testimony, in malpractice suits, that boggles the credulity of a jury tends to weaken confidence in the profession.

One great source of disillusionment among the American people has been the rising cost or thinning cover of health insurance plans.

Those plans that make specific cash allowances for hospital care are falling farther and farther behind actual bills, while plans like Blue Cross, which undertake to cover all of ordinary hospital expenses have increased steadily in price, and the public is beginning to scream.

Yet the principle of some form of health insurance is now well accepted. Two-thirds of America's families are signed up with one plan or another.

In spite of what appear to be enormous daily rates charged by modern hospitals it cannot be honestly said that hospitals are profiteering. Their expenses are up substantially. The cost of physical plant, equipment, nurses and common labor bear no relation to the costs of even ten years ago. And hospital care, of course, is better than ever and the patient who is discharged in four days instead of six can stand a 50 per cent increase in his hospital daily rate without suffering any greater outlay.

Well-known newspaper editor and columnist, Jenkin Lloyd Jones began work for the Tulsa Tribune as a reporter in 1933, becoming editor in 1941 and publisher in 1963. Mr. Jones' weekly newspaper column appears in 150 newspapers with a circulation of 10,000,000. He has been the recipient of many distinguished service awards from various colleges and universities.

Mr. Jones served as President of the Chamber of Commerce of the U.S. in 1969 and as chairman of the board in 1970. He is a member of the American Society of Newspaper Editors, the International Press Institute, and the Inter-American Press Association.

But I wonder if the medical profession has thrown adequate weight behind schemes for getting hospital costs down. In a city like my own, which contains four major hospitals, there is bitter rivalry among them and a determination by each to have the latest and finest equipment, including equipment that is used only once or twice a week. We have made, I must allow, some slight improvement. One of our hospitals by common agreement, has become a major burn center. Is there any reason why certain hospitals should not be designated for the treatment of certain relatively rare ailments? You could save a lot of money in refusing to duplicate exotic gadgets.

Similarly, it seems silly to keep a convalescent patient in a room built at great expense for intensive care. Why shouldn't every hospital have a "getting well" wing with half the nurses, no piped oxygen, no two-way communications and half the gadgets? The therapeutic effect upon the patient, as he finds himself graduated to this half-way-house-to-home, might be considerable and the savings, both in construction and patient care, should be important.

For a long time the American medical fraternity looked upon medical insurance plans with suspicion and left them in the hands of salesmen. It is my impression that the best brains in the AMA have not yet tackled the wide alternatives which might make more people happy with medical insurance under a system which still leaves the doctor a free agent.

The so-called "Major Medical" expense plans are designed to stave off bankruptcy caused by a serious, prolonged illness. In a pamphlet put out not long ago by the AFL-CIO it is said, "In the eyes of the physician this insurance greatly increases the patient's ability to pay and is likely to lead many physicians to charge considerably more than they would in the absence of such coverage."

Remember, of course, this is a labor union speaking which has shown itself to be generally friendly toward socialistic approaches to everything except the pricing of labor. But a large number of Americans share the suspicion that many doctors take notice of insurance benefits and then start calculating ability to pay from that point upward.

It is the fear of catastrophic illness that

haunts the average American much more than a desire to cut the cost of ordinary, short term medical treatment. It would seem to me not only good humanity but good self-preservation if the medical profession studied diligently the possibility of coming up with a reasonably-priced scheme, carrying a healthy deductible, which would still preserve most of a man's estate even if he burnt out his bearings.

For let's not delude ourselves that the general public in America shares the medical profession's horror of socialized medicine. It doesn't. The enthusiasm for Medicare and Medicaid is real, and it is already creating an appetite for steadily-expanding government health services.

When the British Labour Party inaugurated its National Health Service 25 years ago many doctors on both sides of the Atlantic confidently expected it to flop quickly. They pointed to the likelihood of the overuse of hospitals, of sloppy diagnosis and sloppier treatment by doctors who couldn't get their patients in their waiting rooms, of a gradual drying up of medical students as young men would balk at studying so hard to become virtual civil servants.

Most of these predictions were correct. There is a tendency in Britain to overuse hospitalization. Many doctors are rushed, indeed. Abuse of prescriptions reached a point where the government had to impose moderate charges. The quality of medical training and the quality of medical treatment is now vastly superior in the United States. It is significant that a former British prime minister went to Boston for his operation.

But while the British grouse about the medical services as they grouse about everything, you can find almost no one who wants them repealed. For the average Briton, who previously had rarely felt he could afford a doctor, has found himself getting the best medical treatment he ever had. Socialized medicine doesn't have to be excellent medicine. It only has to be better medicine and more medicine than the citizen has been used to. And he is not only satisfied, but delighted.

Last summer Doctor Jack Richardson of Tulsa and I toured Siberia. At Khabarovsk we visited a clinic. I said it looked like 1900

medicine. Jack said it looked more like 1890 to him.

A few years ago I was down in Sochi, the famous Russian health resort on the Black Sea where the shock-workers and quota-exceeding miners are sent on vacation as a reward for having extended themselves for the glory of the Soviet.

In the leading spa a woman doctor who looked like a Japanese sumo champion waddled around showing us with pride the sitz baths and tallow baths and other hoary old bits of quackery which western medicine put in the ashcan years ago. I gathered that the average training of doctors on that staff was about equivalent to that of a U.S. Navy chief corpsman.

This is not to suggest that the top Soviet medical researchers are not impressive by our standards. They certainly are. I merely point out that at the ordinary patient level Soviet medicine is pretty primitive. But so far as I was able to ascertain the workers loved it. They had undoubtedly been told that the whirlpool tubs were a Soviet invention and that the mud packs represented the latest whisper in therapy.

This was medicine as against the no-medicine that they all remembered. It was better than anything they had ever had. And I'm sure they felt compassion for the poor, exploited American worker who must, they are told, cross the doctor's palm with gold or die untended in his hovel.

It is true that because of our general condition of prosperity a larger percentage of Americans have experienced first-class medical care than the citizens of any other nation. It is true that they would not be satisfied with a socialized medicine on the Russian level or even the English level.

But it is disturbing that seven years ago doctors in Saskatchewan only succeeded with the greatest difficulty in modifying a state take-over. Clearly, private medicine all over the world has a selling job to do.

The time may now have arrived when American medicine must worry, not only about public relations, but about publicity. Plain old publicity. I would suggest that every legitimate opportunity be used to demonstrate that doctors—private doctors—are seriously concerned with the public welfare. This type of publicity—propaganda, if you

wish—should be brought down to the level of the county medical society and tailored to the interests of the local community

I am aware that a specific triumph by an individual doctor is not supposed to be publicized in the local press lest he gain an unfair advantage over his colleagues. The physician who reads with interest and sympathy the achievements of a doctor in a neighboring state, as set forth in large spreads in *Time* or *Life*, will have apoplexy if a member of his own society is cited in the local newspaper for righting an upside-down stomach or removing a bullet from a heart.

Newspapermen must, of course, be wary of glory grabbers. There is danger that if the bans were relaxed we might clumsily exalt the medical exhibitionist. But medicine is the only profession I know where outstanding achievement is supposed to be kept a secret from the community in which it has occurred.

Moreover, there is much more to be done than personal publicity. The medical community, as a whole, can legitimately be given a warmer image. Simple things:

It is winter and a flu epidemic strikes. The medical society can release an article, written anonymously by a competent member, discussing the type of flu that is prevalent in the neighborhood, its probable severity, and the best means of avoiding it.

It is spring and the campers are going forth. The medical society describes a new and better water-purifying tablet and warns that in certain nearby counties Rocky Mountain spotted fever has been caused by ticks.

It is summer and everybody is picnicking. The medical society comes up with a release discussing the speed with which salmonella bacteria can spread in warm custards and salads.

It is fall and mothers are frightened because a strange thing called mononucleosis has appeared in several schools. The medical society describes the disease and puts the danger in focus.

What is the community talking about? Is the swimming lake polluted? The medical society should examine the tests and demand corrective action. The police have complained about juvenile glue-sniffers. Is it

really dangerous? The medical society says it is, and why. What can be done about this 24-hour virus, now "going around," and causing nausea and diarrhea? The medical society says "nothing," but it won't kill you.

I do not suggest poaching into the field of the syndicated medical columnist who discusses ailments of all kinds. But I do suggest that the county medical group concern itself with helping the public come to sane conclusions about current local medical problems.

Sure, that's also the job of the director of the city or county health department. But do MD's really want to train people to look to doctors supported by the government for all friendly advice and counsel?

How youngsters feel about doctors is of utmost importance to your future, for they are tomorrow's voters.

I think the medical profession is missing a great chance in its failure to develop a kindly father image in this group.

For example puberty seems to be particularly rough on the younger generation of today. They still hear the stern moral preachments of the traditional Christian ethic in church while at the same time they are intrigued by the new hedonism that advises them to do whatever comes naturally. In many cases there are manifestations of guilt and insecurity. The percentage of teenagers suffering from neurotic symptoms seems to be growing and it occurs to me that it's time for the medical profession collectively to step in with some solid advice and reassurance.

To this end a county medical society could designate articulate members to go before high school assemblies and discuss the problems of growing up. The speakers could assure their young hearers that hot flashes and temporary depressions are not the same as incipient insanity, but that neither is immorality the road to happiness. They should level with the kid about drugs. Young people must be told that a certain amount of frustration is part of wise living and that without a degree of self-discipline there won't be much character development or emotional stability.

I think high school principals would bless such speakers. I believe the youngsters would respond warmly. And it would help

smash the theory that doctors are interested only in those people to whom they can send a bill.

There's a lot that could be done to brighten the image of private medicine in America that simply isn't being done.

Let Oklahomans know that the Oklahoma State Medical Association is not only concerned about medical overchargers, but is prepared to initiate action against habitual abusers even where there are no specific complaints from patients.

Let Oklahomans know that the Oklahoma State Medical Association is all in favor of health insurance, that it will strongly react to those members who may use it as a device for hiking fees, and that it is searching for new forms of insurance that may provide essential coverages at a cheaper price.

Finally, let the Oklahoma State Medical Association talk more often to Oklahomans—not about what doctors want but about what concerns the citizen and his children. Something has to be done about dusting off that old painting again, the one about the pensive doctor at the bedside of the sick child. The hurried MD who dashes through his Thursday morning calls so that he can meet the boys for lunch at the club house may well deserve his half holiday. But a painter wouldn't be able to catch him.

Your genius is conceded. Your techniques are admired. Your researches are held in awe. But these things won't save you from the smothering embrace of the Welfare State.

It is your heart you have to prove. ☐
The Tulsa Tribune, Tulsa, Oklahoma 74102

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Goals For An Effective National Health Program

WILBUR J. COHEN

IN MY OPINION, there are three broad lines which medical care in the United States may take: On the one hand there is a continuation of the present system; on the other, there is the transformation of the present system into a full-time salaried service with practitioners becoming employees of a governmental enterprise—usually called “socialized medicine.” I do not favor either of these two approaches. I favor a pragmatic intermediate approach which builds upon the last forty years of experience in the United States.

I am one of the many persons in our nation who believe that the establishment of a National Health Security Plan is inevitable during the next five years. Such a plan would cover everyone in the nation from birth to death—the rich, the poor; the young and the old; the middle-income earner and the middle-aged; the black, and the white; everyone living or working in the United States in urban or rural areas; in large corporations or small businesses; in domestic service or migratory labor.

The essential elements in a responsible

and responsive National Health plan are the following:

1. *Breaking the barrier between paying for health care and eligibility for service.* One of the key purposes of a national health plan is, as far as possible, to arrange to pre-pay health costs when the individual is working so that basic financial considerations are not a major problem during illness.

2. *Requiring the employee and self-employed to pay part of the costs.* This would assure the individual of a statutory right to benefits without a means test. By large numbers of people paying small amounts over a long time, all individuals can be assured of coverage for comprehensive medical care protection. Such a plan would, as Sir Winston Churchill has said, bring the magic of the averages to the rescue of the millions.

3. *Requiring the employer to pay part of the costs so the immediate financial burden is not so great on the individual.* Moreover, the employer should be involved in the planning of community health services and be concerned about adequate access to health services for his employees and their families.

4. *Requiring the government to contribute part of the cost.* This would enable individuals without incomes or with low income to receive equal access to health serv-

ices on the same basis as those with more adequate incomes. Thus, the stigma of poverty and welfare would be removed from the medical care system. Medicaid could be substantially reduced.

5. *Requiring employee and employer contributions to be handled as part of social security contributions.* This would greatly reduce the cost of collecting contributions which now takes place through hundreds of separate and costly administrative arrangements. A single system of collecting contributions would be more economical than the present system and would reduce the costs of universal coverage by about a billion dollars a year.

6. *Providing for eligibility to services solely and simply by virtue of residence in the United States.* A universal program would simplify the eligibility process, reduce accounting, and keep administrative costs to a minimum. One eligibility card and one reimbursement form for physicians would be feasible.

7. *Assuring that access to service for all persons throughout the nation would be determined by federal rules.* Uniform nationwide contributions to the health security system should be accompanied by uniform nationwide standards of access to services. This would assure an individual of a fair hearing on matters in dispute before a federal agency and an appeal for judicial review on matters of law by federal courts. Thus, due process and equal treatment would be assured every individual irrespective of his color, age, sex, education, or background.

8. *Providing for a broad range of medical services with specific arrangements for extending services over a reasonable period of time.* While comprehensive and complete medical service is a desirable objective, it is not feasible to attain that goal immediately as part of eligibility under a national health program. Hence, any national health program should include specific provisions for a step-by-step expansion of such services as out-of-hospital prescription drugs, nursing home care, dental services, and similar services which require planning and organization for their universal availability. Such planning must be coordinated with plans for training of health personnel, building appropriate facilities, recruitment and rede-

ployment of personnel, and the development of health maintenance organizations.

9. *Providing for new, innovative, economical, and efficient methods of organizing and delivering medical care.* Financial incentives should be provided for expanding ambulatory and outpatient care, improved emergency services, health maintenance organizations, salary and capitation payments, multiphasic screening, periodic examinations, and community-sponsored coordinated plans for health education, family planning, nutrition, and environmental concerns. Nurses and other health personnel should take a more effective leadership role in community health education programs.

10. *Encouraging and accelerating plans for more effective increase in health personnel.* Financial incentives should be provided for expanding the training of more physicians, nurses, dentists, and other health personnel including physicians' assistants, aides, technicians, and allied health personnel. Particular attention should be paid to training more black persons and individuals from other minority groups, and for more women to have opportunities to participate in the health care system. Medical, nursing, and other health schools training health personnel must establish incentives and arrangements to assist in the more rational distribution of personnel and services.

11. *Providing opportunities for the consumer as taxpayer and patient to play a significant role in policy formulation and administration of the health system.* Health care is too important to allow it to be the

Wilbur J. Cohen is Professor of Education and Dean of the School of Education at The University of Michigan in Ann Arbor. Former Secretary of Health, Education, and Welfare, Mr. Cohen has been associated with the broad fields related to human well-being during his entire professional career as a teacher, administrator and policy-maker at national levels. He was the recipient of an honorary Doctor of Laws degree in 1966 as well as honorary degrees from a number of universities. He has received various awards and citations for distinguished service in health, education and welfare.

sole province of any one professional or bureaucratic group, no matter how well trained or well intentioned. Many matters of vital importance are of concern to the consumer: how effectively his money is spent, the efficiency of administration, the manner in which he is treated, assurance of dignity and privacy, the determination of priorities, and a host of other factors other than the diagnosis and treatment of disease or disability. A more effective partnership between the professional, the consumer, and the bureaucrat must be developed.

12. *Assuring health personnel reasonable compensation, opportunity for professional practice, advancement, and the exercise of humanitarian and social responsibility.* The various components in a National Health program should be designed so as to foster the highest quality of medical care with individual and group responsibility for initiative, advancement, and a sense of creative and social responsibility. Individuals providing services should receive fair and reasonable compensation in relation to their ability, responsibility and productivity, and should be able to choose the method of remuneration. Compensation should be adjusted periodically in relation to changes in costs and productivity. Various incentives should be provided to encourage the establishment of groups including health maintenance organizations.

13. *Encouraging effective professional participation in the formulation of guidelines, standards, rules, regulations, forms, procedures, and organization.* There should be widespread participation by all health personnel in the formulation of policy at the highest levels and at every level of administration. A cooperative sense of participation should be fostered which would overcome hierarchal considerations and invidious distinctions based on income, education, or prestige. The nursing profession should

take a leadership role in relating services to individual family and community needs.

14. *Requiring a state health agency to take more affirmative leadership in providing for effective delivery of medical services.* A nationwide plan should utilize state health agencies to stimulate the availability and coordination of services, standards for personnel and services, and handling complaints, grievances and local problems.

15. *Fostering a pluralistic system of administration.* There are widely different ideas in the different parts of the United States and among different groups as to how medical care should be administered. As science and technology continue to develop new methods of diagnosis and treatment, new drugs, and new systems of delivery, we should be willing to adapt our arrangements to new needs and new styles.

CONCLUSION

A National Health Security Plan is not a panacea to solve all the problems of medical care. The continued increase in demand for medical services while the increase in supply remains inelastic will certainly create increasing price and cost pressures for the foreseeable future. Changes in organization, delivery, and access to services will not occur overnight. Changes in school curricula, admissions, and orientation are underway, but will take time.

Health education and preventive health care must be expanded in order to make it possible for the available medical personnel and facilities to handle acute and chronic sickness and disability.

Meanwhile, we must make a more effective effort to distribute medical services in a more rational and socially conscious manner than at present. A National Health Security Plan is a mechanism to focus our planning and our priorities for a more intelligent distribution of the miracles of medical science to the millions. □

OSMA COMMENT IS COMING SEPTEMBER 1st

A new *OSMA Newsletter*, *OSMA Comment*, will be mailed on the first of each month to all OSMA physicians. It is a one-page, front and back, newsletter packed with information designed for quick and easy reading. The first issue will be sent September 1st. Watch for it!

CONTROL OF HOSPITAL INFECTIONS

The week of June 5th through June 9th of this year a short course on hospital infection control was held in Oklahoma City, sponsored by the University of Oklahoma College of Health and involving resources and personnel from several departments within the University Health Sciences Center, the Oklahoma Hospital Association, the National Center for Disease Control, and the State Department of Health.

Infection control is a multi-faceted problem with complex legal, administrative and technical ramifications. The development of effective control programs within hospitals requires the talents of many experts working together under the direction of appropriate authority, generally the hospital infection control committee. Often the expertise needed to develop a surveillance and control program within a given hospital will not be available among the medical staff, the laboratory, or the administration. An innovative nurse or medical technologist can be trained in the basic philosophy and technique of hospital infection surveillance, and can work with hospital administration and staff in designing a system that meets the hospitals specific needs and resources. This



News From The Oklahoma State Department of Health

person will also assume day to day responsibility for the program.

Standards established by the Joint Committee on Accreditation of Hospitals require hospitals to provide at least the following for infection control in their patients: An infection control committee providing surveillance services, a sanitary environment, facilities for the isolation of infected patients, a competent and adequate microbiology service, restricted duties for obstetrical nurses, and adequate measures against contamination of foods. Failure to institute such measures has been taken as evidence of hospital negligence.

The Epidemiology Division of the State Department of Health provides consultation and assistance regarding specific infection problems, including investigations of outbreaks. □

COMMUNICABLE DISEASES IN OKLAHOMA FOR JUNE, 1972

Disease	June 1972	June 1971	May 1972	Total to Date	
				1972	1971
Amebiasis	3	3	2	17	34
Brucellosis	—	—	1	3	3
Chickenpox	8	27	13	131	179
Encephalitis, infect.	1	2	1	4	10
Gonorrhea	817	775	1048	4968	3583
Hepatitis, infect. & serum	79	43	115	402	341
Leptospirosis	—	—	—	1	1
Malaria	—	9	1	2	57
Meningococcal infections	—	—	—	6	4
Meningitis, aseptic	—	—	—	7	10
Mumps	3	14	43	146	185
Rabies in animals	19	18	36	197	230
Rheumatic fever	1	3	6	20	15
Rocky Mt. spotted fever	8	6	4	15	12
Rubella	2	9	16	33	52
Rubella, congenital syn.	—	—	—	—	—
Rubeola	—	17	1	8	777
Salmonellosis	13	15	18	68	77
Shigellosis	9	1	10	36	36
Syphilis	98	112	153	592	671
Tetanus	—	—	—	—	—
Tuberculosis, new active	—	35	36	166	167
Tularemia	1	2	2	5	5
Typhoid fever	—	—	—	1	2
Whooping cough	5	1	—	12	8

Roth Elected — Hoffman Installed

Carl A. Hoffman, MD, of Huntington, West Virginia, became the 127th President of the American Medical Association during its June meeting in San Francisco. He had served one year as president-elect and was followed in that post by Russell B. Roth, MD, of Erie Pennsylvania.

Doctor Roth was elected president-elect after he stepped down as Speaker of the AMA House of Delegates. That position was filled by the election of J. Frank Walker, MD, of Atlanta, Georgia. Doctor Walker had served as vice-speaker of the House. The new vice-speaker will be Tom E. Nesbitt, MD, of Tennessee.

The new vice-president of the AMA is Norman H. Gardner, MD, of East Hampton, Connecticut. He was one of Connecticut's three delegates to the AMA.

In his inaugural address, "Shall the House of Medicine be a House United—or a House Divided?" the new president made an eloquent plea that unionization of medicine be rejected.

He said, "The cry for unionism is being raised in our profession as never before. There is no doubt that trade unionism has been an effective and valuable social instrument in our nation. But is it a proper activity for physicians to engage in?"

It is not, Doctor Hoffman said, because "unionism seeks its objectives through group power—and it achieves its power by carefully controlled conformity.

"This is the very objection we as a profession have raised against government-controlled medicine. The source of power of unionism lies in its ultimate weapon—the strike. A strike, even the threat of a strike, is a threat to withhold services. It is,

therefore, a violation of medical ethics.

"Cynics may scoff, but millions of Americans still do enjoy a close personal relationship with their physicians. Polls prove conclusively that, despite all the negative comments, Americans by and large still believe in their doctors, in our commitment to our profession and to our patients."

Before choosing unionism Doctor Hoffman cautioned physicians to "consider well and carefully." As an alternative he called for unity in the profession through a representative consensus, as found in the AMA.

On other matters Doctor Hoffman said, "Peer review is an idea whose time has come. With the acceptance of the third party payor system, we accepted the ultimate necessity for certain controls by those who pay the bills. It is in the public interest—and in our own interest—to develop a flexible mechanism that is credible to the public, and does not lower the dignity of the profession. . . . Peer review was initiated by the profession itself. It would be tragic and a dereliction of duty if we were to surrender that initiative to others. It is not only the better part of valor, but the best part of realism, not to let that happen."

He stated, "We, as a profession, must have impact on all the matters that concern us—on medical education, on peer review, on quality of care, on government programs. We can have that impact only if we are able to exert the power that derives from unity . . . not controlled conformity . . . unity—acceptance of a representative consensus." ☐

Abortion Questionnaire Prepared For OSMA

At the direction of the OSMA House of Delegates, a questionnaire seeking physician's views on abortions has been prepared and distributed to all members of the association. Results of the questionnaire will be made available to members, the legislature, and the press as soon as they are available.

In a letter accompanying the questionnaire, Stanley R. McCampbell, MD, President, said, "On numerous occasions your association has been asked for its position on the subject of liberalizing Oklahoma's abortion law. Because of the moral and religious issue involved the association felt that it could not take a position which would express the feelings of its membership."

He then went on to point out that the OSMA has repeatedly informed the Oklahoma Legislature that it has "no position" on the subject of liberalizing abortion law because of the moral and religious issues involved. However, on numerous occasions medical witnesses made themselves available to legislative committees to answer "medical" questions regarding abortions. These physicians appeared as representatives of the OSMA.

Oklahoma's current abortion law simply provides that an abortion shall be a crime unless performed to preserve the life of the mother. Both the procuring and performance of an abortion for any other reason are considered criminal acts.

"The question of liberalizing Oklahoma's abortion law will come before the State Legislature again," McCampbell said. In anticipation that it will be asked for its position, the OSMA survey results will be made available to the Legislature, the press, association members, and the OSMA Board of Trustees.

The survey consists of approximately 25 questions, most of which can be answered with a check mark.

In addition to the abortion questions, four questions on the survey concern the giving of contraceptive information and methods to sexually active minors. ☐

Oral Polio Sunday Set For September 10th

Preparations to immunize up to 200,000 Oklahoma children against polio are being made by the OSMA, the Oklahoma State Health Department, the Oklahoma Osteopathic Association, and the 124 Kiwanis Clubs in Oklahoma. The mass immunization is set for Sunday afternoon, September 10th.

Known as Oral Polio Sunday, the project was endorsed by the OSMA House of Delegates during its May meeting.

Immunization clinics will be set up in schools and churches throughout Oklahoma to administer the oral polio vaccine. They will be staffed by physicians, nurses, and Kiwanians.

The 124 Kiwanis Clubs in Oklahoma have primary responsibility for organizing the campaign. They will be establishing the registration system, clinic locations, and furnishing logistic support for distribution of supplies and materials.

The vaccine at each clinic will be offered free of charge to all children between the ages of one and 18 years who have received less than three doses of oral polio vaccine. Primary emphasis will be on those children ages one through 12 years.

The poliomyelitis immunization level in pre-school children in Oklahoma has been dropping at a rate of about 10 percent a year. It is estimated that there are 200,000 children in Oklahoma who are not adequately protected against poliomyelitis.

Followup immunizations for those children who have had only one or two doses after the campaign will be handled through family physicians or will be available from the local county health department.

Chairman of the OSMA Immunization Committee, Armond H. Start, MD, has written all Oklahoma physicians and asked for their full support in this community health campaign. In addition he has contacted hospitals and other medical personnel asking for support. ☐

Unionism Attractive To Many Physicians

Unionism is becoming more attractive to the nation's physicians according to the *Wall Street Journal's* July 5th issue. Physicians across the country in growing numbers are joining militant labor organizations that will supposedly represent the private practitioner.

The journal reports that physicians, "once considered the last major bastion of rugged individualism," are organizing in order to match the muscle of the insurance concerns and government health programs that now pay two thirds of the nation's medical bills.

Carl A. Hoffman, MD, new president of the AMA came out strongly against unionism in his inaugural address. "The cry for unionism is being raised in our profession as never before," he said. "There is no doubt that trade unionism has been an effective and valuable social instrument in our nation." He then went on to question whether or not it was a proper activity for physicians.

Stating that unionism is a violation of medical ethics per se, he said, "The source of power of unionism lies in its ultimate weapon—the strike. A strike, even the threat of a strike, is a threat to withhold services. It is, therefore, a *violation of medical ethics*."

The *Wallstreet Journal* article indicates that physicians joining unions say they are doing so to maintain the quality of medical care.

While very much in its infancy, the physician's labor movement is rapidly mounting with nearly 3,500 office based physicians belonging to some labor federation. "*Medical Economics*" recently reported that one of their surveys showed that three out of every five physicians in the country believed in some form of unionization.

Unionism among interns and residents had been gaining ground and winning labor concessions from hospitals in salaries, working conditions, and quality of service. This success, according to the *Journal*, probably contributed to the union push. ☐

McC Campbell Urges OMPAC Membership

OSMA President Stanley R. McC Campbell, MD, has urged all Oklahoma physicians to join the Oklahoma Medical Political Action Committee, OMPAC. His encouragement was made in the form of a personal letter to every physician in the state not already a member of OMPAC.

Of the OSMA's 2,400 members, over 900 are already members of OMPAC. In his letter to the non-members Doctor McC Campbell said, "As physicians, our greatest ambition is to be left alone in order to give more and better medical care to sick people. Given the current political climate, however, we are not going to be left alone. We must enter the political arena. The choice is ours—to participate and win, or be buried in a morass of government regulations and reports."

The president went on to point out that OMPAC has been very active in its past support of political candidates and that it can have much greater impact if more money is available during this election year. "OMPAC was the single largest contributor to Senator Bellmon's campaign," the doctor said, "... and by pooling our resources, we can have a much greater impact. OMPAC must be a bi-partisan effort since friends of medicine are not necessarily of one party. This contribution may be the most important thing that we can do this year to save American medicine."

Doctor McC Campbell reiterated his belief that OMPAC must be active in state legislative races. The effectiveness of the state association's legislative efforts can be directly affected by medical participation in political campaigns.

The solicitation letter closed on an unusual note when the president stated, "... if our message about the effectiveness of OMPAC is not getting across, we need to be informed about your views on the subject." He opened his letter by encouraging all physicians to join OMPAC and then stated, "... if you are disinclined to, would you write me a note and tell me why." ☐



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Marijuana One Topic At AMA Annual Convention

While press reports made it sound like the AMA House of Delegates was concentrating on its policy on marijuana, in fact the House considered a large number of subjects during its 121st meeting in San Francisco June 18th-22nd.

The following is a brief summation of just a few of the House of Delegates policy actions:

Regarding marijuana, the House refused to accept the statement which said, "Possession of marijuana for personal use and transfer (not sale) of insignificant amounts should not be criminal acts." After extensive debate, this substitute recommendation was adopted: "This AMA House of Delegates does not condone the production, sale or use of marijuana. It does, however, recommend that the personal possession of insignificant amounts be considered at most a misdemeanor with commensurate penalties applied."

The substitute recommendation went on to say that the House "... also recommends its prohibition for public use; and that a plea of marijuana intoxication should not be a defense in any criminal proceeding."

A policy opposing employment of physicians' assistants in hospitals was adopted by the House. Reflecting concern for "potential problems which could arise," the House approved a report from the Council on Health Manpower of the AMA which stated, "the Council believes that direct responsibility to and supervision by a physician is a critical element in the safe and effective performance of a physician's assistant."

The report went on to recommend that a physician's assistant "not function in that capacity when an employee of or paid by a hospital or by a fulltime, salaried, hospital-based physician."

The House also adopted a report containing guidelines for compensating physicians for the services of physician's assistants. It urged legislation to empower state boards of medical examiners to approve a phy-

sician's employment of an assistant and to approve proposed functions of the assistant, as described by his employer. Reimbursement for assistant's services should be directly to the employing physician, the report said.

An expanded role for nurses in the provision of patient care came under study by the House. It strongly reaffirmed support for such expansion and called for study of the nurses' role in relation to the physician-assistant, so the two professions can complement rather than duplicate one another.

Insurance coverage for alcoholism and drug dependents was recommended by the House when it adopted a report from the AMA Board of Trustees. The report stated, "Insurance carriers should be urged to provide non-discriminatory coverage for alcoholism and drug abuse."

Fee determinations took the spotlight when AMA delegates approved a strong resolution aimed at any independent determination of customary physician's fees: "Resolved, that where benefits include physician's fees, management, labor and third party carriers shall consult with duly constituted representatives of organized medicine before determining 'usual, customary and reasonable fees,'" the measure said.

The resolution was adopted in lieu of several others, all protesting actions of Aetna Life and Casualty Insurance Company. It added, "The medical profession will not condone or tolerate action on the part of any third party that would encourage or promulgate litigation in the settlement of any such dispute." This referred to a practice of telling policy holders that—except where there was prior agreement between patient and physician as to the fee—the insurance company would pay the patient's legal costs if the physician sued to collect his full fee.

The House took the opportunity to remind physicians, through the resolution, "That they have the right to enter into prior agreements with patients regarding the fee for services to be rendered."

The House received, and adopted, results of the first membership opin-

ion poll on critical issues affecting the practice of medicine. The overwhelming majority of 94,000 respondents recommended that AMA continue to seek and retain the basic principles of private practice in any government enacted health program. According to a number of delegates one of the questions before the AMA generated "a great deal of smoke, but very little fire." Another, during the debate unsuccessfully invited other delegates to "butt out" of smoker's business. The question was whether or not to discourage smoking during sessions of the AMA's House of Delegates. The debate was accompanied by several hacking coughs and when the vote was finally cast Vice-Speaker of the AMA House J. Frank Walker, MD, of Georgia announced, "Speaker Russell Ross and I, both being smokers, reluctantly agree that the ayes have it." □

Patient Notice Required By Price Commission

The requirement that all patients must be notified that a schedule of fees for a physician's office is available is still in force. The Price Commission requires that a sign be posted in a prominent place somewhere in the waiting room and that a list of fees for major services be made available.

Failure to post the sign could result in a maximum fine of up to \$5,000 upon conviction of willful violation of the regulation. One New York physician has already been fined \$1,500.

Nationwide spot checks by IRS agents indicate that over 50 percent of doctors have not satisfied the sign posting requirements.

Regulations regarding the sign say only that it should be "prominently displayed and easily readable." The size of type, wording, and actual location seems to be left up to the physician's discretion.

The following wording has been suggested by the OSMA for such signs: "In compliance with the Economic Stabilization Program, a schedule of base price information for this office is available at the receptionist's desk." □

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Medicare Administration Costs Over \$138,000,000

In fiscal year 1970 the administrative costs of Part B Medicare carriers, the part which pays physicians' bills, amounted to \$138,079,900. The figure was contained in the fourth annual report on Medicare to the United States Congress from the Secretary of Health, Education and Welfare.

The \$138,000,000 figure cited above does not include the administrative costs of the governmental agencies involved in Medicare, the Social Security Administration and HEW. The 1970 figure also represented a \$19,000,000 increase over the carrier costs in fiscal 1969 of \$118,375,000.

The report stated, "The entire cost of administering Part B in fiscal 1970 was 11 percent of benefits paid. Carrier costs alone were 8.3 percent." Total medical insurance benefits paid in fiscal 1970 amounted to \$1,979,000,000. Payment for physician services represented 89.7 percent of this amount.

In fiscal 1970 while the carriers were using \$138,000,000 in administrative costs, medical insurance bills were reduced by a total of \$185,000,000. The report stated, "Charges were reduced by 34 percent of the medical insurance bills with an average reduction of 6.7 percent . . . in fiscal 1969 about one out of four bills were reduced by an average of 5.2 percent, with a total reduction amount of \$120,000,000."

Under the heading of "Physicians Services" the report stated, "In fiscal 1970, a total of 32.7 million bills for physician's services were approved for payment and recorded in Social Security Administration records, in comparison to 30.3 million bills in fiscal 1969." Surgical services were represented by 14.4 percent of the total number of bills and 85.6 percent covered medical services. The average surgical bill was \$163, the same as in 1969. The average medical bill was \$49, down from \$52 in fiscal 1969.

Referring to the qualification of hospitals and nursing homes to receive Medicare payment, the report said, "Motivated largely by its con-

cern that the largest possible number of institutions be eligible to participate in the program, Medicare, through agencies in each state, has worked closely with many institutions to help them make the improvements necessary to qualify for participation." However, the report went on to state that since the inception of Medicare in 1966, 189 hospitals have been "voluntarily" or "involuntarily" terminated. "Most of the terminated hospitals and extended care facilities were small (under 50 beds) proprietary institutions and tended generally to be located in rural areas," the report stated.

One small section of the report contained the reference to possible changes in current regulations. It stated, "Under Medicare regulations, hospitals and extended care facilities are relatively free to establish the number of days which constitute an extended stay requiring review by utilization review committee. Although most providers have chosen reasonable and appropriate limits, some have not. *A revision of regulations now being considered would define extended stay and establish limits beyond which utilization review would be mandatory.*"

Another possible change in this same area involves the "required review of admissions, short stay cases and professional services rendered. . . ."

In a discussion of provider reimbursement, the report said that experiments were being conducted in "prospective rate reimbursement" for hospitals and ECFs. "Prospective reimbursement differs from the retrospective cost reimbursement in that the rate of payment is set in advance of the period to which it will apply. *In this way, the provider is offered financial incentives for improving efficiency and reducing actual costs, since it may retain all or part of the resulting savings, but stands to lose if it does not contain costs.*"

In the covering letter attached to the report Secretary Elliott Richardson of Health Education and Welfare said, "Medicare's reimburse-

ment requirements have induced many providers to streamline their accounting and administrative practices. And, despite whatever deficiencies it may still suffer, utilization review is today a considerably more effective mechanism among many more providers than it had ever been before Medicare.

"Rising costs have been the biggest source of concern, and this administration quickly came to realize that Medicare, as presently designed, does not offer enough incentive to control costs. Several of the administration's legislative proposals . . . are addressed to the problem of costs. They are intended not just to induce cost controls but also to make program costs more predictable and to introduce incentives for economy and efficiency."

Secretary Richardson closed with a plea for the administration's proposals concerning Health Maintenance Organizations. He stated, "Modeled on private prepaid plans now in use, the Health Maintenance Proposal is aimed at holding down costs through incentives for more efficient utilization of services." □

Tulsa County Medical Society Awards Scholarships

The Tulsa County Medical Society has awarded \$4,500 in scholarships to nine students of medicine and nursing for the 1972-73 school year.

Robert M. Shepard, Jr., MD, President, said six cash grants were made to students of the University of Oklahoma College of Medicine, and three to students of accredited nursing schools in Tulsa.

The Doctor Maxwell A. Johnson Memorial Scholarship of \$600, named for the Tulsa urologist and medical leader who died last year, was given to Robert Carl Ingram, a junior at the University of Oklahoma College of Medicine.

The Doctor Luvern Hays Memorial Scholarships, created in memory of the Tulsa pediatrician who died in 1965, were awarded to Edwin Kent McClanahan, \$600, and to B. Camille Groskurth, a third-year stu-

dent at the University of Tulsa School of Nursing, \$300.

Scholarships provided by the Woman's Auxiliary to the Tulsa County Medical Society went to Robert J. Coffey, a junior at the OU School of Medicine, \$600, and to Nancy L. Reavis, Claremore, a freshman at Hillcrest Medical Center School of Nursing, \$300.

Other awards were:

Jack S. Elder, a freshman at the University of Oklahoma College of Medicine, \$600.

David J. Griffin, a freshman at the University of Oklahoma College of Medicine, \$600.

Richard N. Marple, a senior at the University of Oklahoma College of Medicine, \$600.

Claudia N. Kincaid, a second-year student at St. John's Hospital School of Nursing, \$300.

Marple, Ingram, McClanahan and Coffey were previous recipients of the medical society scholarships.

The awards, given annually to students of medicine and health careers, are administered by the Scholarship Fund of the Tulsa County Medical Society, a non-profit educational and charitable foundation established in 1963. □

FDA Declares Diapulse Without Therapeutic Benefit

Diapulse devices have been declared to have no known therapeutic value by the Food and Drug Administration. This view has now been supported by the federal courts and the manufacturer has been enjoined from shipping or selling its products in interstate commerce.

The announcement came as the Food and Drug Administration was seizing two Diapulse units in possession of a Norfolk, Virginia Hospital. The seizure came as a result of the court ruling and is only the first of a number of such actions planned.

Over 4,000 Diapulse units have been distributed throughout the United States and in several foreign countries. Purchasers include hospitals, clinics, medical doctors, chiropractors, and other practitioners.

The manufacturer of the units, Diapulse Corporation of America, has been selling them for \$2,400 to \$3,000 each. The machine resembles a conventional diathermy which is used to produce deep heat treatment.

The FDA ruling, based on laboratory and clinical tests, concluded that there is no known therapeutic benefit to be derived from use of the Diapulse.

In October, 1969, the government stopped paying claims under the Medicare Program for Diapulse treatments. □

Social Security Reform Goes To Senate

A controversial version of the House passed Social Security-Welfare Reform Bill known as HR-1 has been sent to the Senate floor by the Senate Finance Committee. After nearly 16 weeks in Executive Session the Committee arrived at a final draft of the bill which will make dozens of major changes in Social Security, Medicare and Medicaid Programs.

HR-1 has already been strongly criticized by the American Medical Association, Blue Cross-Blue Shield, the National Medical Association, the Nixon Administration, and even by members of Congress. Because of the far reaching effects of the bill Senate floor debate is expected to be "hot and heavy."

Costs of making HR-1 law has been estimated by the Health, Education and Welfare Department at \$12.6 billion more than the present law. Social Security, Medicare and Medicaid increases will take program costs up to \$76.2 billion from the current \$63.6 billion.

The following is a partial listing of major changes to be made if the bill becomes law:

- Social Security and disability benefits would be increased across the board by ten percent with automatic cost of living increases.

- A guaranteed minimum monthly payment of \$200, or \$300 for couples, would be provided after 30 years in Social Security covered employment.

- Professional standards review organizations, known as PSROs,

would be established to control utilization and costs under Medicare and Medicaid.

- Chiropractors would be included under Medicare and Medicaid for spinal manipulation, providing they meet minimum HEW standards. (Such standards have not been issued by HEW heretofore.)

- Limit increases in physicians' fees allowable for Medicare purposes to increase costs of practice and earnings level of community.

- Cover speech therapists and clinical psychologists under Medicare outside physician-directed clinics but still in organized settings up to \$250 monthly on outpatient basis.

- Cover the disabled under Medicare after being eligible for Social Security benefits for at least 24 consecutive months.

Washington pundits expect that moves will be made to separate the Social Security benefits from the Welfare reform portions of the omnibus bill in order to assure that the Social Security increase passes this year. □

Professional Liability Alters Medical Practice

Concern over the possibility of a malpractice lawsuit has affected the practice of medicine according to the 1972 AMA Opinion Survey. Results of the survey were made public during the AMA's Annual Meeting in San Francisco.

Ninety-four thousand physicians responded to the survey. Over 70 percent said that they ordered extra lab tests, x-rays and other diagnostic procedures because of the current situation regarding professional liability. Over 59 percent stated that they ordered extra consultations and nearly 45 percent indicated extra hospitalization.

On a geographic breakdown, physicians in the Pacific coast states were much more concerned about professional liability than their professional colleagues on the east coast.

The survey also revealed that physicians under age 30 appear to feel the affects of professional liability activities more severely. In this age group 82.6 percent felt the need for

extra diagnostic procedures, 66 percent asked for extra consultations and nearly 50 percent admitted to extra hospitalization.

Responses from hospital based and office based physicians were nearly identical in all regards.

When broken down to specialties, general practitioners expressed the most concern about the need for extra procedures. However, they were closely followed by internists and obstetricians-gynecologists.

Psychiatrists were the least concerned about the professional liability situation. Only 25 percent admitted to extra hospitalization, approximately 40 percent called for extra consultations and about 44 percent used extra diagnostic procedures.

Oklahoma physicians, along with those from Texas, Arkansas, and Louisiana, seem to be more cautious than their colleagues in just about any other area of the United States. With 7,635 responses from the four state area, nearly 80 percent admitted to extra diagnostic procedures, nearly 60 percent said they ordered extra consultations, and nearly 49 percent admitted to extra hospitalization. □

Physician's Fees Increase Less Than Price Guidelines

During the first nine months of the Economic Stabilization Program physician's fees increased only 1.37 percent, according to an AMA study. During the same period the overall consumer price index rose 2.05 percent.

The "Physician's Fee Index" is a component of the "All Services Index" of the Consumer Price Index. The All Services Index rose 2.16 percent during the nine months from September, 1971, through May, 1972. This compared to 3.03 percent during the previous nine months.

During the same September through May period, the semi-private hospital room index . . . also part of the All Services Index . . . increased by 3.84 percent, compared to 6.62 percent for the previous eight months.

The AMA study was prepared by

its Center for Health Services Research and Development. It was based on recently published data from the federal government's Bureau of Labor Statistics.

The 1.37 percent rise in physician's fees means that the increase is well within the goal of the Health Services Industry Committee and the Price Commission to reduce the rate of inflation by one-half. This amount represents an increase of less than one-third of the 4.38 percent rate increase for the nine months prior to the freeze.

In commending the nation's physicians for their efforts to control inflation, Charles A. Hoffman, MD, AMA President said, "I think these figures prove that physicians—largely through self imposed restraint—have made a major effort to help stem inflation. It should be noted, however, that physician's fees are only a very small factor in the overall effort to control inflation since only 1.4 percent of the gross national product goes for physician services." □

Newsletter Becomes "OSMA Comment"

OSMA News, the medical association's five-year old newsletter, will change on September 1st and become "OSMA Comment." In its new form the newsletter will be a one page, front and back, publication.

To be published on the first of each month starting in September, *OSMA Comment* will consist of short highly condensed news items of immediate interest to the profession. The main feature of the new publication will be its easy and quick readability.

OSMA Comment will be sent to all member-physicians in care of their homes so that it might be shared with the physician's family.

The new news format was authorized by the OSMA House of Delegates during its annual meeting. In the past as much as two or three weeks have elapsed between the writing of an article for the *OSMA News* and its final publication. With the new format, news can be written, printed, and distributed in one to two days. □

Book Reviews

PEDIATRIC THERAPY. Harry C. Shirkey, Editor. Fourth Edition, 96 contributors. 1183 pp., 443 illustrations. St. Louis: The C. V. Mosby Company, 1972. \$34.50.

This is the fourth edition of this important book; the first edition appeared in 1964. The publication of four editions in such a short time attests to the importance and acceptance of the book. The basic purpose of this compendium is to review contemporary treatment methods in child health, including general pediatrics and in the major pediatric specialty areas. In addition to covering specific treatment of disorders by organ systems, it also has excellent chapters on the management of neonatal and surgical problems. There are several new chapters in this edition including those dealing with radiation therapy, oxygen therapy, treatment of acute bacterial meningitis, modification of laboratory tests caused by drugs, pediatric orthopedics, recreational therapy and others. The sections on poisonings and their treatment and on drug dosages are again printed on tinted paper for ready reference.

The fourth edition of *Pediatric Therapy* maintains the high standards of previous editions. It has become a standard reference for medical students, house officers, and physicians dealing with children and is highly recommended.—Harris D. Riley, Jr., MD

THE PINEAL GLAND. A Ciba Foundation Symposium. Edited by G. E. W. Wolstenholme and Julie Knight. Churchill Livingstone: Edinburgh and London. 401 pp. 1971.

The Ciba Foundation has sponsored symposia on topics of world wide medical interest. This publication summarizes the latest knowledge about the pineal gland presented in a symposium held 30 June- 2 July 1970.

It is of interest that this conference grouped together scientists interested in biology, pharmacology, anatomy, dermatology, endocrinology, physiology, psychiatry, and nutritional science.

Two of the major leaders of the conference were Julius Axelrod, an American Nobel laureate, and his academic descendant, Robert Wurtman.

The knowledge of the pineal is slowly increasing due to the disclosure that melatonin and other catecholamines are either stored or formed in the pineal gland. HIONT is an active enzyme uniquely found in the pineal, which is influenced by light and aids in the formation of melatonin.

The role of the pineal remains unknown. To the casual reader of new medical advances, this text will be enticing. However, the average physician, regardless of his specialty, will put the text away rapidly or may not read it at all.—Robert G. Fisher, MD

AMA DRUG EVALUATION 1971.

AMA Council on Drugs, American Medical Association, Chicago, Illinois. 1971. 983 pp. \$15.00.

This is the first edition of an AMA Council on Drugs publications that replaces "*New and Unofficial Remedies and New and Unofficial Drugs.*" The Council has attempted to provide an unbiased, comprehensive and authoritative reference on both old and new drugs. Because of its size, it must remain on a library shelf which will lessen its usefulness in busy outpatient clinics and wards. However, it has apparently achieved one of its stated goals of providing unbiased information. It is surprising but refreshing to find in its statements about widely used drugs that classify them as "irrational" or "not having been proved effective."

There is a general information section on the use of drugs in pregnancy, dosage, drug interactions, pharmacogenetics and other pharmacologic topics as well as a section on adverse reaction symptoms.

One weakness of the book is the lack of bibliographical documentation. Physicians prescribing a drug for the first time should consult this useful volume.—Harris D. Riley, Jr., MD

ANTIMICROBIAL AGENTS AND CHEMOTHERAPY, 1970. G. L. Hobby, Editor. Williams and Wilkins Company, Baltimore. 545 pp. \$15.00.

This volume contains the proceedings of the Tenth Interscience Conference on Antimicrobial Agents and Chemotherapy. It brings together a wide variety of contributions which has something to offer to anyone interested in infectious diseases and antimicrobial therapy. There are 102 papers from the symposium. Unfortunately, discussion of the papers is not included.

The material is divided into seven headings: Synthetic Antimicrobial Agents and Chemical Studies, New Penicillins, Pharmacological Studies and Toxicology of Antimicrobial Agents, The Control of Infections in Humans, Antimicrobial Resistance and Mechanism of Action, In Vitro Antimicrobial Action and Experimental studies of Infection in Animals and Humans.

Two of the larger sections involve the new penicillins and in vitro antimicrobial testing. The papers on the control of human infections emphasize the large number of Pseudomonas infections of children and the paucity of new information on the treatment of infections of the urinary tract.

This is the last volume of this series since the proceedings of future annual sessions will be presented in a new journal, *Antimicrobial Agents and Chemotherapy*.—Harris D. Riley, Jr., MD

AMERICAN MEDICINE AND THE PUBLIC INTEREST. Rosemary Stevens. Yale University Press, New Haven. 1971. 572 pp. \$18.50.

The author of this large book states her aim is to trace the historical development of organized medicine in the United States from the colonial period up to the present. She then speculatively proceeds into the future to the year 1980 in a discussion of the probable development of forms of organization and financing. The book is divided into five parts beginning with Colonial Times and continuing up to the present. Parts II

and III deal with the organization, maturation and success of specialism and the interactions of the various specialty boards with the American Medical Association. Part IV, the period since 1950, deals with the increasing emphasis on biomedical technology and its effect on medical education. The final section of the book examines recent health legislation and the role of the federal government in health services. The final chapter predicts the future forms of organization that medicine can expect as based on her historical analysis of past trends and movements.

Professor Stevens believes that this country will have a national health insurance program within the next ten years but that it will not spring up over-night. She believes the new system will be built on foundations of the older system and envisions five prototypes for development; expanded comprehensive hospital services, multispecialty groups, neighborhood health centers, primary care units and health care networks modeled after the medical society foundation. She further anticipates a greater differentiation of medical schools, increasing government leadership and development of health services and more planning and regionalization of services.

Doctor Stevens has obviously researched her subject thoroughly. This is a well documented and readable account of American medicine and its social, legislative and professional evolution.—Harris D. Riley, Jr., MD

NOSOCOMIAL INFECTIONS-INTERNATIONAL CONFERENCE. Proceedings of the International Conference on Nosocomial Infections. Center for Disease Control, August 3-6, 1970. American Hospital Association, Chicago, Illinois. 1971. 334 pp. \$1.50.

This monograph contains the proceedings of the International Conference on Nosocomial Infections held in Atlanta, at the Center for Disease Control, in August 1970. It contains 49 papers, three panels and summary discussions concerned with hospital-associated infections in the

United States, Denmark, Great Britain, Israel, Canada and Yugoslavia. The emphasis is on the American experience. The papers are grouped by topics, such as microbial factors, emerging pathogens, host susceptibility, sources of nosocomial infections, air control techniques, control of microbial contamination, systems for control and, finally, the legal aspects.

The papers focus on current problems with specific viral, bacterial and fungal diseases. It is a valuable addition for those concerned with infectious diseases.—*Harris D. Riley, Jr., MD*

CHEMICAL INFLUENCES ON BEHAVIOR. By Ruth Porter and

Joan Birch. First edition. Cloth, 221 pp. London: A. & A. Churchill, 1970.

This book is basically a compilation of the activity of the CIBA Foundation Study Group No. 35 which was convened to focus on issues within the general topic of chemical influences on behavior. Initially, the statement is made that man is exposed to a variety of natural and synthetic chemical substances which cause a variety of physical diseases. It is also noted, however, that many substances cause mental disorders as well. Consequently, the point is made that studies of chemical influences on the organism should be concerned not only with CNS or pharmacological effects but also with long term behavioral effects. The

question is then posed as to whether animal behavior tests can and should be developed to give indications of possible hazards to mental health, mental development or to accident proneness in man. The book presents several papers dealing with topics ranging from the usefulness of animal tests for prediction of behavioral effects of chemicals on man to phenomena and their relationships to growth and behavior. The papers are, without exception, interesting and the discussions following them are, in general, stimulating. The questions presented above are not unequivocally resolved but the reader will not be able to avoid thinking about them to an extent he has not done before.—*David A. Vore, PhD*

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**Prevalence of solar keratoses in white persons
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☐ Persons without solar keratoses ☒ Persons with solar keratoses

*Data on file, Hoffmann-La Roche Inc., Nutley, New Jersey.



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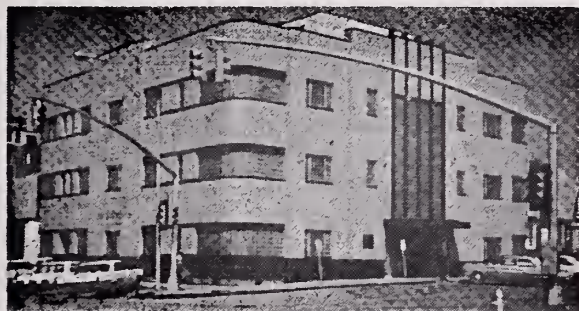
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The JOURNAL

of the Oklahoma State Medical Association

DEADLINES

December Issue

Editorial, Scientific, Book Reviews	October 15, 1972
Advertising Copy	November 15, 1972
News Copy, Miscellaneous Ads	December 1, 1972

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JOURNAL

BALCONY

Volume 65—Number 9—September 1972

OKLAHOMA STATE MEDICAL ASSOCIATION

September



The negative power of clinically significant anxiety
in angina pectoris...



This man feels he is living
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Pinworm therapy is often a family affair



Contraindications: History of hypersensitivity to thiabendazole.

Warnings: If hypersensitivity reactions occur, drug should be discontinued immediately and not resumed. Rarely, erythema multiforme has been associated with thiabendazole therapy; in severe cases (Stevens-Johnson syndrome), fatalities have occurred. Because CNS side effects may occur quite frequently, activities requiring mental alertness should be avoided. Safe use in pregnancy or lactation has not been established.

Precautions: Ideally, supportive therapy is indicated for anemic, dehydrated, or malnourished patients prior to initiation of anthelmintic therapy. In presence of hepatic or renal dysfunction,

patients should be carefully monitored.

Adverse Reactions: Most frequently encountered are anorexia, nausea, vomiting, and dizziness. Less frequently, diarrhea, epigastric distress, pruritus, weariness, drowsiness, giddiness, and headache have occurred. Rarely, tinnitus, hyperirritability, numbness, abnormal sensation in eyes, blurring of vision, xanthopsia; hypotension, collapse; enuresis; transient rise in cephalin flocculation and SGOT; perianal rash, cholestasis and parenchymal liver damage; hyperglycemia; transient leukopenia; malodor of the urine, crystalluria, hematuria; appearance of live *Ascaris* in the mouth and nose. Hypersensitivity reactions

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addendum

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INDICATIONS	DOSAGE (1st Day)	ADDITIONAL REGIMEN	COMMENTS
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Threadworm,* large roundworm,* hookworm,* and whipworm* disease	Two doses of 1 tablet/50 lb	Repeat the next day	Alternatively, a single dose of 2 tablets/50 lb may be given. However, a higher incidence of side effects should be expected.
Creeping eruption	Two doses of 1 tablet/50 lb	Repeat the next day	If active lesions are still present 2 days after completing this regimen, a second course is recommended.
Symptoms of trichinosis* during the invasive phase of the disease	Two doses of 1 tablet/50 lb	Repeat for 2 to 4 successive days	The optimal dosage for the treatment of trichinosis has not been established.

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*Clinical experience with thiabendazole for treatment of each of these conditions in children weighing less than 30 lb has been limited.



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Usage in Pregnancy: See "Contraindications."

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Indications. For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).

Warnings. *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

Precautions. Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with pre-existing liver dysfunction.

Adverse Reactions. The most frequently encountered adverse reactions are related to the gastrointestinal system.

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"The history of science, and in particular the history of medicine... is... the history of man's reactions to the truth, the history of the gradual revelation of truth, the history of the gradual liberation of our minds from darkness and prejudice."

—George Sarton, from "The History of Medicine Versus the History of Art"

**Would it be useful
in clinical practice to have
government predetermine
drugs of choice?**

Opinion

Results of a survey of physicians:

13.3%

Yes, it would be useful.

86.7%

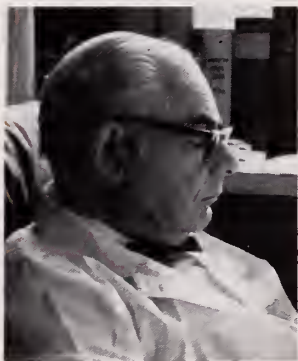
No, it would not be useful.

Dialogue

Would it be useful in clinical practice to have government predetermine drugs of choice?

Doctor of Medicine

Walter Modell, M.D.,
Professor of Pharmacology,
Cornell University
Medical College,
Editor,
Clinical Pharmacology
& Therapeutics,
Drugs of Choice,
Rational Drug Therapy



The proposition that government should determine one or two "drugs of choice" within a given therapeutic class reflects the belief that a similarity in molecular structure insures a close similarity in pharmacologic effect. But this is by no means the rule. An obvious example would be in the field of diuretics, where a small change in chemical structure accounts for substantial dif-

ferences in concomitant effects such as potassium excretion.

Any attempt to dictate the "drug of choice" would be complicated by the fact that some populations demonstrate a bimodal distribution in their reaction to drugs. If the data on drug response are mixed for the total population, one drug will appear to be as useful as the other. But if drug response is reported separately for different segments of the population, drug A will be found to be better for one group and drug B for the other.

It may, of course, be possible to determine drugs of choice in particular categories on a broad statistical basis. But there are always certain patients in whom a drug produces odd, unpredictable or idiosyncratic reactions. So, though a drug might statistically be the most useful one in a given situation, individual variations in response might make it the *incorrect* one.

The point I wish to make is that if two, three, four or more drugs in one class are of approximately equal merit, that in itself is justification for their availability. Exceptional cases do arise in which one drug would be useful to a certain

segment of the population and another drug would be of no use at all. In the practice of medicine, the physician must be prepared to treat the routine as well as the unusual case.

Another objection to the determination of a drug of choice is that precise statements of *relative* efficacy are very difficult to make—much more difficult than statements of efficacy. For example, in testing drug efficacy, it is easy to determine the difference between a drug that is effective in treating a condition and one that is not at all effective. Thus, it is fairly easy to determine whether a drug is more effective than a placebo. But if you compare one drug that is effective with another drug that is also effective, and the relative differences between them are very slight, statements of relative efficacy may be very difficult to make with assurance.

I do not mean to imply that relative efficacy statements are not useful or can never be made. With some groups of drugs (e.g., analgesics), extensive study and precise methodology have yielded useful information on relative efficacy. But in most situations, such information can be acquired only through studies encompassing three to five years of use in many more patients than are used to compare drugs with a placebo for the introduction of a drug into commerce. It is really only after practitioners use a drug extensively that relative safety and efficacy

in practice can really be determined.

The Bureau of Drugs has suggested the package insert as a possible means of communicating information on relative efficacy of drugs to the physician. I find this objectionable, since I do not believe the physician should have to rely on this source for final scientific truth. There is also a practical objection: Since few physicians actually dispense drugs, they seldom see the package insert. In any event, I would maintain that the physician should know what drug he wants and why without depending on the government or the manufacturer to tell him.

Undoubtedly, physicians are swamped by excessive numbers of drugs in some therapeutic categories. And I am well aware that many drugs within such categories could be eliminated without any loss, or perhaps even some profit, to the practice of medicine. But, in my opinion, neither the FDA nor any other single group has the expertise and the wisdom necessary to determine the one "drug of choice" in all areas of medical practice.

Maker of Medicine

Kenneth G. Kohlstaedt, M.D.,
Vice President,
Medical Research,
Eli Lilly and Company



In my opinion, it is not the function of any government or private regulatory agency to designate a "drug of choice." This determination should be made by the physician after he has received full information on the properties of a drug, and then it will be based on his experience with this drug and his knowledge of the individual patient who is seeking treatment.

If an evaluation of comparative efficacy were to be made, particularly by government, at the time a new drug is being approved for marketing, it would be a great disservice to medicine and thus to the patient—the consumer. For example, when a new therapeutic agent is introduced, on the basis of limited knowledge, it may be considered to be more potent, more effective, or safer than products already on the market. Conceivably, at this time the new drug could be labeled "the drug of choice." But as additional clinical experience is accumulated, new evidence may become available. Later, it may be apparent

that the established products should not be so easily dismissed.

Variation in patient response to drugs constitutes one of the major obstacles to the determination of "drugs of choice." We are just beginning to open the door on pharmacogenetics, but it is evident that genetic differences cause wide variations in the way drugs are absorbed, metabolized, etc. This fact alone is sufficient to make unrealistic the idea that there is one drug in each class to be used for every human being.

The problem of determining relative drug efficacy is an extremely complicated one. Comparison with other drugs of the same class should not be a prerequisite for marketing a new substance. In some therapeutic areas, it may be difficult to make accurate comparisons. For example, in the treatment of infections it is not possible to conduct crossover studies. Recovery may be influenced by factors which cannot be controlled or measured, i.e., natural host resistance and virulence of infective agents. A drug's acceptability must often be judged on the basis of its own performance, and this may be limited to experience in a relatively small patient population. If the introduction of a new drug must await the adequate establishment of relative efficacy, the duration of clinical trial and extent of studies would be greatly prolonged, particularly for rare or unusual conditions. The availability of a new drug would be delayed. Many patients might suffer needlessly and lives might be lost.

Relative efficacy can best be established by experience in a general patient population through regular channels of clinical practice. The physician considers the patient as a whole, which means the patient often has multiple problems and drugs must be selected with this in mind. Hence, a "drug of choice" in an uncomplicated case may not be the best drug for a patient with associated problems. Publication of well-controlled studies in medical journals may provide comparative evidence; discussions at medical meetings, presentations at postgraduate courses, and the new audiovisual technology may bring evidence to physicians on comparative therapy. In a free medical marketplace, a drug that does not measure up will fall into disuse. For example, broad clinical experience has established vitamin B₁₂ as the "drug of choice" for the treatment of primary pernicious anemia. No amount of advertising or promotional effort by the manufacturer could increase the use of liver extract for this anemia. How-

ever, a physician may wish to employ parenteral liver preparations for a special purpose.

In the field of surgery, peer review in the hospital has brought significant improvement in the use of new techniques and procedures. Something of this nature would be useful in the area of drug therapy. However, it should be developed by the medical profession itself and would necessitate, for its proper function, an improvement in the dissemination of reliable data on clinical pharmacology of drugs under consideration.

Ideally, information on the relative efficacy of drugs should be gathered and assessed by the physicians who actually administer the specific agents to a specific patient population. To do this, they will need even more information on the drugs they use—information that the pharmaceutical manufacturers must begin to provide if government regulation of "drugs of choice" is to be avoided.

Opinion & Dialogue

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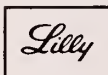
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Gonorrhea—A Current Epidemic

ONE OF, if not the most serious medical problems facing the United States and Western Nations, is the pandemic of venereal diseases. Gonorrhea and syphilis have been preventable, diagnosable and curable by relatively simple and readily available techniques for some 20 years. Yet today gonorrhea ranks first and syphilis third among the reportable communicable diseases in the United States.^{1,2} The true incidence of gonococcal infection of both male and female is difficult to establish accurately since at the present it is dependent on reported cases. Gonorrhea, as with most other reportable diseases, is notoriously under-reported by practicing physicians, resulting in a significant bias in available statistics.³ However, even with inadequate statistics, the rates clearly show that gonorrhea, always endemic, is now out of control and has reached epidemic proportions in many parts of the world. In addition, ophthalmia, salpingitis and other complications of gonorrheal infection are exhibiting the expected parallel rise. Moreover, the incidence of strains of gonococci resistant to penicillin is increasing about as rapidly as the incidence of gonorrhea. All age groups are being affected by this resurgence of gonorrhea. For example, at the Children's Memorial Hospital, University of Oklahoma Health Sciences Center, during the past year, 13 children less than 16 years of age have been seen with proved gonococcal infection. In 1970, in the United States 33% of the cases of gonorrhea occurred in persons less than 20 years of age.¹

As mentioned above, the true incidence of gonorrhea is unknown. A survey in 1969 of reporting practices indicated that private physicians were treating 79% of the cases of gonorrhea in the country, but that they were reporting to health officials less than 17% of cases they treated!² On this basis a conservative estimate of the annual incidence in the United States is 2,000,000

cases.¹ On a global basis, the World Health Organization estimates that 65 million new cases occur annually.⁴ Reported cases of gonorrhea have increased for 12 of the last 13 years and for the past several years the rate of increase has exceeded 15% per year. The 216,476 cases reported in 1957 (130 cases per 100,000) has increased to 573,200 cases (285.2 cases per 100,000) reported for fiscal year 1970.^{5,11}

From 1919 through 1939, rates of reported cases ranged from a high of 177.7 cases per 100,000 population in 1921 to a low of 121.4 cases per 100,000 in 1933. The lowest rates of reported cases during this 20-year period occurred during the years 1931 through 1936. Case rates rose during the years 1931 through 1936 and again during World War II and, in 1947, reached a peak of 284.2 cases per 100,000 population. After this year the incidence decreased, and a low postwar rate of 129.3 was reported in 1958. Since 1958, the reported case rate of gonorrhea has steadily increased annually in the United States. The rate of 285.2 per 100,000 reported for 1970 is almost identical to the previous all-time high rate reported in 1947. However, because of population growth during this interval, there were 170,451 more cases reported in 1970 than in 1947.¹¹ Between 1941 and 1969 the highest rates in the United States occurred in 1947, 1968 and 1969, and the lowest rate in 1958.⁶

Every state and region in the country has reported increases in cases since 1957 and a summary of national data indicates that increases have occurred in all races, in both males and females, in all age groups, in large and small cities and rural areas, and among patients of both public and private medical facilities.¹¹

However, urban rates in this country are far higher than in rural areas. Many urban areas have gonorrhea rates as much as five times the national average. More than half the venereal disease problem is concentrated

special editorial

in cities over 500,000.⁷ Despite the limitations of under-reporting, the number of civilian cases of gonorrhea per 1,000 population in the United States in 1969 was 15 times as numerous in the racial group designated "Other" (in the United States, primarily black) than for the white group. White males had rates approximately twice as high as for females; for males in the group designated "Other," the rates were three times as high as for females.⁶

From a geographic standpoint, the reported incidence of gonorrhea in various countries reveals some surprising findings. Sweden and Denmark, two of the most highly civilized nations in the Western World, have had rates consistently higher than those in the United States, which is in third place, ahead of Denmark since 1965. Japan, Poland, Norway, the United Kingdom, France, Italy, and Ceylon have rates considerably lower than the United States. Rates in Finland and the United States are similar. The higher rates in Sweden and Denmark probably are accounted for, in part, by better reporting and contact investigation (both of which would combine to find more cases) rather than truly significant higher rates.⁷

The age distribution of gonorrhea demonstrates clearly that it is primarily a disease of the young. Data for 1969 show it assuming significant frequency at puberty, reaching the highest levels in the age group 20 to 24, and then declining to age 50 and older at which time the rates are similar to those in the 14 and younger group. In fiscal year 1969 cases in the age group 20 to 24 years were reported at the rate of 1,412 per 100,000 or one case for every 71 persons age 20 to 24 years in the United States.⁷

The mode of transmission of gonorrhea is the principal explanation for its age distribution, which, starting at puberty and the onset of significant heterosexual intercourse, reaches peak levels at the same time in life when heterosexual activity for males, at least, is greatest.^{6,7} For females, the age group of greatest risk is 20-24 years followed rather closely by 15-19 years. Although males 20-24 years old have the highest risk also, the next highest rate among males is in the age bracket 25-29 years which is followed by the 15-19 years group. Well over

half of all reported cases in each sex are among persons less than 25 years of age.¹¹ A paragraph from the report of WHO Expert Committee on the Health Problems of Adolescence in 1965⁸ points to the magnitude of the problem of venereal disease, not only in numbers, but to the factor of the sex drive that makes control so different and more difficult than for any other infectious disease.

"Studies of 1,000 male gonorrhea patients, aged 15 to 60 years, and representing the lower social and economic group of a section of Los Angeles, revealed that 80 per cent had a history of previous venereal infection and 54 percent had acquired their initial infection between the ages of 15 and 19 years. Further, 26 percent of those reporting with a first infection returned with a new infection during the six months' duration of the study."

Najem and Lynn⁹ reported on the epidemiologic aspects of 25,294 reported cases of gonorrhea in Oklahoma from 1965 to 1969. The overall mean annual rate of reported gonorrhea cases was 202.2 per 100,000 population during this period but the secular trend increased from 1956 to 1969. The geographical distribution indicated that the mean rate of the 77 counties in Oklahoma was 35.7 cases per 100,000 population in 1969, with rates ranging up to 426.5 among the counties. A majority of the cases were from urban areas and the rate of 1687.1 cases per 100,000 population among Negroes was remarkably higher than for other races. There were three times more male cases than female. The age distribution of the cases ranged from less than one year to over 85 years of age, with the peak in the age group 20-24 years. However, there was a progressive increase in incidence of cases in the age group less than 24 years and the largest increase in cases was in the age group 15-19 years.

Although gonorrhea is primarily a disease of adolescents and adults, both the upper and lower age limits for active acquisition of venereal disease are being expanded. Guthe² of the World Health Organization related that a recent analysis of 20,000 cases of gonorrhea at the Hospital St. Louis in Paris showed the youngest to be a 12 year old boy whose father had taken him

to a brothel (the father paid the fee), while the oldest was an 84 year old man whose son had taken him to a brothel (the son paid the fee).

What is the cause of this current epidemic of gonorrhea? It is due to a skein of interdependent, microbiologic, medical, moral and social factors. Some of the commonly cited reasons why gonorrhea continues to flourish include a very brief incubation period, the frequent asymptomatic nature of the infection in females, lack of natural or acquired immunity, increased use of contraceptive pills and intrauterine devices, public apathy, changing moral standards, and decrease in susceptibility of the gonococcus to penicillin and other antibiotics.

It has been postulated that the use of oral contraceptives by the most sexually active segments of the population has contributed to greater promiscuity, since fear of pregnancy is removed allowing for greater frequency of intercourse and exposure to gonorrhea. Actually, gonorrhea rates began to go up in 1957, a good seven or eight years before the widespread use of "the pill." The reasons for the accelerating rates since 1964 are not clear. It is likely that the role of "the pill" is not as important as it is said to be. Much more likely a factor is the substantial increase in the size of the reservoir, the infected asymptomatic female and the male carrier.⁷

One of the most important reasons for the striking increase in the incidence of this disease is the enlarging pool of asymptomatic female carriers. Even under optimal conditions, diagnosis in the female is often difficult. The best laboratory procedure, the culture, is positive in only about 70% of females exposed to known cases of gonorrhea.² The reservoir for the gonococcus is thought to be the female much more frequently than the male. Unless the female has complications or severe acute manifestations of the primary infection, she may be asymptomatic or at least with symptoms so mild that they do not act as a deterrent to sexual intercourse and transmission of infection to a susceptible male. They are truly carriers of the disease, and between 50% and 75% of infected women fall into this category and constitute the principal reservoir of gonorrheal infection. There is some evidence,

however, that the male may be an asymptomatic urethral carrier more often than was previously thought. If control of gonorrhea is to progress at all, better means must be found of diagnosing the silent carrier state, particularly in females.

Another important contributing factor is the increasing resistance of the gonococcus to antimicrobial agents. Only in the last several years has agreement been achieved among world experts that a "relative" resistance of gonococcal strains to penicillin-G has and is continuing to develop. This problem is being reported by country after country but does present some marked differences in degree, even within limited geographic areas. The pioneer investigators of penicillin reported the gonococcus to be the most susceptible pathogenic micro-organism studied in the mid 1940's. Virtually all strains collected prior to 1955 were inhibited by 0.06 unit/ml or less of penicillin *in vitro*. Although most of the early reports were based on clinical rather than concomitant microbiologic tests-of-cure, there can be little doubt that a single injection of 300,000 units of aqueous penicillin-G produced cure rates approaching 100%.⁵ Noticeable clinical failures were not apparent until the mid 1950's. The studies by the National Center for Disease Control have been important in establishing that gonococcal resistance to penicillin is indeed a real phenomenon. Beginning in 1965, periodic widespread analysis of routine gonococcal isolates was begun by the Center. It was demonstrated by 1968 and 1969 that the majority of gonococcal strains were at least moderately resistant to penicillin. An increasing percentage of isolates were found to require 0.5 unit or more of penicillin for *in vitro* inhibition. It is at this level that significant failure rates occur when recommended penicillin dosages are used. In 1962 none of the strains isolated had a minimum inhibitory concentration (MIC) of greater than 0.5 mg/ml. However, by 1969, 16% of the isolates showed a MIC greater than this concentration. The most resistant isolates require 3.5 units/ml for *in vitro* inhibition.⁵

The emergence of antibiotic resistance has been relatively slow and stepwise. Cross resistance between antibiotics usually has been observed, even between compounds with bas-

ically different modes of action. Resistance of the gonococcus to other agents such as streptomycin and tetracycline has also developed and, in fact, the rate of increase in resistance to these agents has been greater than that to penicillin-G.⁵

Gonococcal resistance appears to be due either to a single genetic factor making for multiple drug resistance or the presence, in the organism, of extrachromosomal DNA carrying a number of closely linked genes for drug resistance. The first—a single genetic factor making for alteration of gonococcus cell wall permeability—seems the more probable.²

Other antimicrobial agents have been shown to be useful in the treatment of gonococcal infections. These include ampicillin, tetracycline, and a new aminocyclitol antibiotic, spectinomycin, and in some instances, the cephalosporins. New treatment regimes have recently been established by the Venereal Disease Branch of the Center for Disease Control.¹⁰

Space precludes a detailed discussion of approaches to the control of gonorrhea. However, certain fundamental facts should be mentioned. Perhaps in no other disease is the actual mode of transmission so deliberate and so well understood. It has been stated that epidemics can be readily produced experimentally by adding fresh, susceptible recruits to an already infected population. In effect this is occurring because fresh susceptible human recruits are being added daily to an already infected population at the time that heterosexual activity begins; thus, the epidemic is not likely to die out naturally. Two mechanisms which determine the outcome of most epidemics play an insignificant role in gonorrhea. These are the removal of susceptibles by death or the acquisition of immunity, neither of which significantly affects gonorrheal rates. There is no evidence that one attack of gonorrhea, either in the male or the female, confers any significant degree of immunity.⁷

The methods used successfully in bringing syphilis under control, namely case finding and contact investigation, have not been applied rigorously to gonorrhea, and furthermore, it is doubtful whether they would be

correspondingly successful because of, among other reasons, the short incubation period of gonorrhea. A very important part of any control program is the effective treatment of patients, both male and female, who too often are given an injection of penicillin and are never seen again. Acceptable criteria for cure must be based on careful clinical and bacteriologic evaluation of each patient with retreatment when indicated and continued follow-up and observation until cure is certain. Since infection cannot definitely be ruled out by clinical findings and present microbiologic methods, ideally all named female contacts of patients with gonorrhea should be given prophylactic treatment and follow-up care.⁷

Basic to any control program is prevention, and an important need in this area is greater emphasis on venereal disease through programs on health and sex education in schools. Paralleling health education in schools should be an updating of community programs for education about venereal disease.

The possibilities of developing a serologic test to detect gonorrhea are currently under investigation. The Center for Disease Control is now conducting pilot studies utilizing the complement fixation, flocculation and indirect fluorescent antibody techniques.² Results to date have definitely established that female carriers of the gonococcus have a strong antibody response to the infection. The major problem with the serologic tests at present is the number of apparent false positive reactions encountered with serum from presumably noninfected individuals.¹¹

Efforts to develop an anti-gonococcal vaccine using the same approach as that used for anti-meningococcal vaccines appear encouraging.¹¹

Gonorrhea was recently transferred from man to chimpanzees for the first time and several of the experimental serologic tests for gonorrhea became positive. It seems likely that this animal model will have an important role to play in the refinement of serologic tests and in the study of vaccines.¹¹

There is a pressing need for increased research in all aspects of gonorrhea. Very little is known about many facets of this infection such as the natural history in fe-

males, the infectivity of the carrier state, the existence and role of L-forms of gonococci, the incidence of ophthalmia neonatorum, and the incidence and mechanisms of infertility resulting from gonococcal infections. HDR ☐

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Medicine was meant to be a quiet, scholarly, friendly experience for physician and patient alike, in which there is plenty of time for discussion, reading, research, and time to develop a really close relationship. That this is

no longer possible is due to an immense increase in demands on the physician's time. The absence of this close relationship is responsible for some of the very valid criticism of modern medicine.

The benefits of modern scientific medicine are so great that no one really wishes to return to the days or manner of practice of our great-grandfathers. When the old country doctor arrived, he was about as dusty as the roads he traveled, smelled like his horse, and his medicines were little more effective than his prayers. But, he was quite interested and responsive to his patient's needs. Imagine how great he would have been with modern surgery, drugs, electronics, x-ray equipment, and isotopes.

Part of the change since the times of our great-grandfathers is the increase in demand that at times overloads our computers. One of my patients who telephoned at 4:00 a.m. complained that I was slightly grumpy. I explained that it makes a lot of difference if he is the first or eighth to call in one night. People who telephone the office during a busy day may have to wait one to two hours for a response from me and spend the time fuming with anger, although the question was not even urgent. Perhaps we should instruct our answering service and secretaries to inquire firstly if the call is an emergency and react accordingly.

The waiting time in the office for an appointment is spent usually in growing dislike of the system, not really soothed by Musak or fresh magazines. We should schedule appointments realistically. The habit of

bunching up appointments for our own convenience may keep some patients waiting several hours. This does little for our collective image. If we keep a patient waiting as much as five minutes, it is very disarming to open your remarks by saying: "I am sorry to have kept you waiting, but some urgent problems intervened."

The above are illustrations of the rat race that the practice of medicine has become. As a practicing physician, I get the feeling that I am spending my life going 45 miles per hour in a 35 mile zone. It is like attempting to pack twelve pounds of manure into a ten pound bag—it's a mess!! As this overload due to demand increases, our product is sure to suffer. As we get more angry at government interference and nit-picking by other third parties, our product will become even less effective. In fact, one of the characteristics of physicians involved in professional liability suits is that they are overly busy. In the years to come, we can anticipate an increase in harrassment. As our practice gets more overloaded, we must not allow it to affect our product.

Doctors are expected, quite rightly, I think, to continue to work and be effective through pestilence, wars, and riots. In fact, it is a part of being a pro that we guard against being upset by external events. We must not carry to the bedside of sick people our own frustrations. I am reminded of a Korean doctor that I had the pleasure to work with who said: "As those around me get more excited, it makes me more and more calm." I have seen English physicians work steadily without apparent concern through threats of bombing attacks. (But, the English are a stoic race. They even put up with Socialized Medicine.)

One of the many challenges to modern physicians is: We must administer the miracles of modern medicine in the face of an overloaded demand—complicated by maximum external stress as our society increases in complexity—while, at the same time, emulating the old country doctor's equanimity.

□

S.R. McCampbell, MD

A Critical Look at the Indwelling Catheter

PATSY L. MITSCHER, BS
CARMEN B. SEWELL, MBA, BS, MT
(ASCP)
WILLIAM F. BIRD, MD
DONALD D. ALBERS, MD

Most indwelling urethral catheters are not left in over three days in acute care hospitals. Is the influence on urinary tract infections significant?

ENCOURAGED BY THE Committee on Infection Control, a study was carried out to reflect on the incidence of bacteriuria with indwelling catheters in Presbyterian Hospital in Oklahoma City. The indwelling catheter has been condemned by many authors, and urine cultures account for a high percentage of the bacteria isolated in the hospital laboratories. It was hoped this study might give us some indication of the efficiency of the catheter care and tell us if indwelling catheters were significantly increasing the number of positive urine cultures.

PROCEDURE

The general procedure for this initial study was to culture the urine from one hundred patients who had indwelling catheters in order to determine the rate of new

bacteriuria in about seventy-two hours. Urologic patients having bladder or prostatic surgery were excluded from this study. These were routine postoperative or other patients in retention who required catheter drainage. Routine sterile technique was used to insert the catheters. No antibacterial ointments or solutions were used in the urethra and no special techniques were used to prevent infection, such as three way irrigation, etc. The catheters were all left in place throughout the study and no bladder irrigations were carried out.

Cultures were made during the first twenty-four hours after the catheter was inserted and again within an eight hour period after it had been in seventy-two hours. A special system was negotiated with the nursing personnel to initiate the culture and special laboratory slips were used for the study. The technique utilized in getting the urine specimens has been described by Siegreen¹ and Schmidt.² The catheter is not disconnected from the drainage tube, but a clamp is applied to the drainage tube to allow the catheter to become filled with urine. Then the catheter was cleansed with alcohol close to its point of insertion on the drainage tube and with a small needle (23 or 25 gauge) and disposable syringe, urine was aspirated through the wall of the catheter (Fig. 1) Two to five cubic centimeters were withdrawn and taken to the laboratory immediately for inoculation on appropriate media. The Kirby-Bauer technique for sensitivities was utilized routinely.³

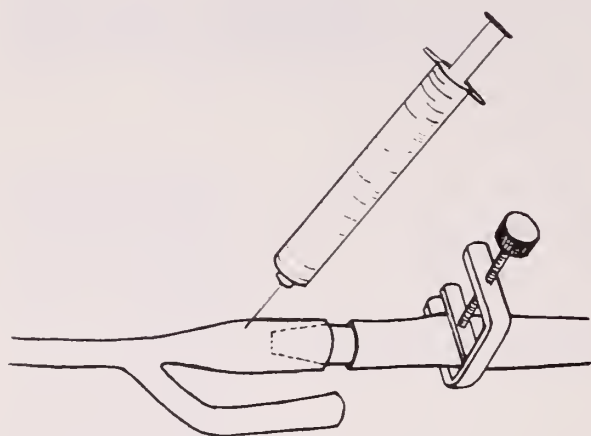


Fig 1

RESULTS

A total of one hundred patients (33 male and 67 female) were studied by this technique. The results can best be expressed by separating them into four categories:

(1) In 61 patients there was no growth during the first 24 hours and no growth after 72 hours.

(2) Twenty-two had significant bacteriuria (over 10,000 colonies per cc.) initially, and had the same bacteria at the end of 72 hours, usually in larger numbers.

(3) Five patients had bacteria initially and no bacteria at the end of 72 hours.

(4) Twelve patients had no bacteria initially and had significant bacteriuria at the end of 72 hours.

DISCUSSION

After reviewing the charts on these patients, pertinent observations were made on these different categories of results. Of the patients (category [1]) who had no bacteria in 24 hours as well as none after 72 hours, we were impressed with the fact that most had been on some antibacterial drug. Of those who had bacteriuria initially (category [2]) as well as in 72 hours, it was observed that these patients were not on antibacterial medication. The next group of five (category [3]) who had bacteria initially in their urine but not at the end of the 72 hours were all found to have been on antibacterial medication. Of the twelve in the last group (category [4]) who started out with no bacteria and ended up with bacteria,

we found that only two had any antibacterial medication during this seventy-two hour period. In several of these latter cases the urine cleared promptly with institution of antibacterial therapy. It should be emphasized that during the study antibacterials weren't given because of the indwelling catheter, but for systemic infections or prophylaxis prior to general or gynecological surgical procedures.

The literature on this subject is replete with accusations directed at the catheter^{4,5} and implications that antibacterial therapy is of little value in cases with the indwelling catheters.^{2,6,7} However, there is some evidence that when a three-way catheter is used and continuous irrigation with some antibacterial is carried out, the infection

Patsy Mitscher, BS, MT (ASCP), received her BS degree from Oklahoma Baptist University in 1958 and at the time work was done on this paper she was Section Chief of Microbiology at Presbyterian Hospital in Oklahoma City. She is a member of the American Society for Medical Technology and the Oklahoma Society of Medical Technologists.

Carmen B. Sewell received her BS degree from the University of Oklahoma in 1959 and her MBA from Oklahoma City University in 1967. She completed Medical Technology training as an MT (ASCP) at Wesley Hospital in 1960. She is affiliated with the American Society for Medical Technology, the Texas Society of Medical Technologists and the American Medical Writers Association.

William F. Bird, MD, a 1939 graduate of the University of Virginia Department of Medicine, is now taking a residency in urology at the University of Oklahoma Health Sciences Center.

Since his graduation from Northwestern University Medical School, Donald D. Albers, MD, has been certified by the American Board of Urology. In addition to his private practice, Doctor Albers is Clinical Professor of Urology at the University of Oklahoma College of Medicine. His medical affiliations include the American Urological Association, a Fellow of the American College of Surgeons and a Fellow of the American Academy of Pediatrics.

rate or the bacteriuria is reduced considerably. There is no question that the catheter will predispose to bacteriuria and also that having the proper antibacterial in the urine will decrease or eliminate the bacteria. Since we have so many antibacterials that are excreted promptly in the urine in large concentrations, it would seem to be indicated by our study that oral or parenteral medication might be of some value, at least on a short term basis. Our experience with bacteria and indwelling catheters appears better than the Beeson⁴ report in 1958 when almost 100% were found infected within four days.

Probably the greatest benefit derived from this study is that it generated concern in the hospital for care in catheterizing patients and in the training of those persons involved. The technique of getting cultures by aspirating through the wall of the sterilized catheter rather than disconnecting the catheters became standard in the hospital and is a distinct improvement. This technique obviates the manipulation of the open end of the catheter with contamination of the edges and the frequent contamination of the culture tube by the tip of the catheter.

There is some evidence that antibacterial solutions or ointments used in the urethra and on the catheter at the time of catheterization might be helpful in preventing the development of bacteriuria. Cleansing of the meatus and the use of antibacterial agents at the meatus seem logical and deserves more study.

SUMMARY

This study reports the incidence of bac-

teriuria in one hundred patients with indwelling catheters left in place more than 72 hours. Sixty-one of the patients remained free of bacteriuria. Twenty-seven patients had significant bacteriuria at the onset of the study and 22 of these persisted with bacteriuria at the end of the study, showing some improvement. Twelve patients who had no bacteriuria initially had significant bacteriuria at the end of the study. This latter group implicates the indwelling catheter as a continuing factor in bacteriuria. There was a definite correlation between absence of bacteriuria and the administration of antibacterials.

Catheter care technique improved as a result of this study and the technique of obtaining urine cultures from indwelling catheters was improved and standardized. With good care and especially with the use of oral or parenteral antibacterials, bacteriuria in patients with indwelling catheters occurred infrequently during a 72-hour period of study. Antibacterial medication probably should be given prior to removal of the catheter and for a few days following removal. □

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Sequelae of Lead Poisoning in Children

ROBERT LEA FULWILER, MS
LOGAN WRIGHT, PhD

Although the reported incidence of lead poisoning in Oklahoma is below that of most other states, the number of cases found may depend on how hard one looks.

IN RECENT YEARS lead poisoning has become one of the most common forms of poisoning in children.¹ There were over 500 cases reported in New York City in 1964,² and lead poisoning accounted for 4.7% of all accidental poisonings in children in Chicago in 1959-61.³ According to the Department of Health Education and Welfare, 400,000 children are poisoned annually in the United States by repeated intake of lead-based paint.¹⁷ Of this number between 10,000 and 20,000 subjects have symptomatic intoxication, approximately 200 die each year from the disease and about 4,000 suffer serious neurological damage.^{4, 17} Usually children get lead poisoning from chewing on or eating wood coated with lead-based paints. Such paint is the type used almost universally in older (pre-World War II) buildings. According to the 1960 housing census, 30.6 million of the occupied housing units in the

United States were built in or before 1939.¹⁸ Recent surveys in certain large cities revealed that from 40% to over 80% of houses in selected slum areas still contain dangerous quantities of flaking lead paint that was applied many years ago.¹⁸ Although it is most common in older "slum" areas, it is not necessarily restricted to that environment. Lead poisoning has also been reported in children residing in more socially and economically advantaged homes. In addition, instances of lead poisoning secondary to exposure to lead-polluted air have been observed.

The reported incidence of lead poisoning in Oklahoma is not high by comparison to the incidence of other states. For instance, during the period 1956-71, 26 cases of lead poisoning in children were recorded at the University of Oklahoma Health Sciences Center. However, it is likely that, in Oklahoma, there may be a large number of unrecognized, subclinical cases of lead poisoning. A recent preliminary survey by the Bureau of Community Environmental Management in low income areas in Tulsa (according to an oral communication in October, 1971 from H. L. Spencer, Chief of Laboratory, Tulsa City-County Health Department, Tulsa, Oklahoma) revealed that approximately 20% of the sample had blood lead concentrations of 40 $\mu\text{g}/100\text{ ml}$ or greater, the concentration according to the U. S. Public Health Service indicative of lead poisoning.⁴ It is significant that none of the hospitals in Tulsa report having treated

From the Department of Pediatrics, Children's Memorial Hospital, University of Oklahoma Health Sciences Center.

any children for this disorder. In areas in which doctors are not alert to the possibility of lead poisoning, the symptoms may be ignored or ascribed to other causes.

Due to increased efficiency of treatment, the mortality rate associated with lead poisoning has declined, but it has become more and more apparent that many of the victims suffer some form of intellectual or behavioral sequelae. The specific sequelae seem to be related to the length of exposure, speed of diagnosis, and the method of treatment. In cases of re-exposure the probability of sequelae is virtually 100%.¹⁶

The purpose of this article is to relate sequelae to relevant post-diagnostic factors and to provide data concerning the prognosis for sequelae in lead poisoning.

INTELLECTUAL SEQUELAE

The most obvious area in which sequelae might be suspected is intellectual functioning. Although reported data are not always consistent with regard to diagnostic criteria or measuring devices, some conclusions can be drawn. The severity of intellectual sequelae seems to be closely related to whether or not encephalopathy is present. If encephalopathy is present, the probability of sequelae is at least 40%.⁴ The issue of sequelae is clouded in instances in which encephalopathy cannot be documented. Here, the probability is not as established, and depends on other factors such as promptness and method of treatment, and the presenting symptoms.

Chisholm⁵ and Hardy⁶ have hypothesized that amounts of lead below that associated with acute lead poisoning may interfere with the formation of heme and other brain enzyme systems, especially during the period of rapid central nervous system (CNS) growth in early childhood. Chisholm⁷ has also stated that lead inhibits sulfhydryl enzymes, and can produce increased cranial capillary permeability and petechial hemorrhages which may cause neural destruction and cerebral edema.

In 19 of 21 studies involving patients with and without encephalitis, the reported percentages of sequelae ranges from 20%⁸ to 95%.^{9,10} The majority, however, reported

percentages between 33% and 66%. These findings are exemplified by the studies of Jenkins and Mellins,¹¹ who found that at 23 months post treatment 50% of their patients were below normal intellectually, and that 23% could be classified as mentally retarded. Other investigators, although agreeing with Jenkins and Mellins, have found that the retardation is not necessarily global, but more specific, *ie*, in the areas of perception, language, and form discrimination (circumscribed learning disability). Such deficits may allow the patient to appear normal, but still experience difficulty in school performance and learning. The suggestion has also been made that the sequelae to lead poisoning often takes the form of aphasia. Chisholm⁷ states that all children who have been treated for lead poisoning should be psychologically tested to determine if they should be placed in special classes. Only two studies^{12,13} have reported no sequelae in nonencephalitic patients.

The probability of sequelae is also related to the type of treatment employed. The two main agents used are dimercaprol (BAL) and calcium ethylene-diaminetetra acetate (CaEDTA). These two agents have differential effects, both physiologically and in influencing sequelae. As chelating agents, BAL has a more rapid physiological effect in reducing the acute symptoms; however, CaEDTA seems to be more efficient in the reduction of sequelae.^{14,16} It is recommended that the two agents be used simultaneously.

Upon reviewing the literature on lead

A 1971 graduate of Central Washington State College, Robert Lea Fulwiler is now a teaching assistant in the Department of Psychology at the University of Oklahoma, Norman.

Logan Wright, PhD, received his degree in 1962 and since has been certified by the American Board of Examiners of Psychologists. He is now an associate professor at the University of Oklahoma Health Sciences Center. Doctor Wright is a member of the American Psychological Association, the Southwestern Psychological Association, the Oklahoma State Psychological Association and is President of the Society for Pediatric Psychology.

poisoning, one is struck with the high probability that symptoms of the disorder may go unrecognized and therefore be unresponded to. The present reviewers are also impressed with the importance of obtaining psychological testing data in order to estimate sequelae and recommend appropriate schooling experiences.

BEHAVIORAL SEQUELAE

The recognition or determination of emotional or behavioral sequelae is much more subtle and subjective than are difficulties in the intellectual area. The main reason is that the effects of the syndrome are hopelessly confounded with the effects of environmental deprivation, which often characterizes the lives of children in the socio-economic area which produces the largest incidence of lead poisoning.

Reported percentages of emotional sequelae to lead poisoning range from none to 85%.^{8, 15} The majority of investigators report that 33% to 68% of their cases displayed some form of abnormal behavior or emotional actions. These studies are best represented by those of Chisholm⁷ who states that children who have been poisoned by lead are hyperactive, easily distractible, and emotionally labile. They tend to display regressive behavior and often do not develop "normal" sibling or peer relations. There appears to be a close relationship between severity of intoxication and emotional sequelae. Also, the type of treatment apparently does not have a strong relation to emotional sequelae, while the ability of the parents to provide emotional support does.¹⁶

NEUROLOGICAL SEQUELAE

Perlstein and Attala¹ report that 38% of the patients afflicted by lead poisoning with encephalopathy are mentally retarded; 54% have recurrent seizures, and 13% have cerebral palsy. If seizures are the presenting symptoms, 23% are mentally retarded, and 39% continue to have seizures. Sixty percent of the patients who present with ataxia have some form of sequelae as do 33% whose entry complaint is gastrointestinal. The

fact that only 20% of the patients who are simply febrile and 10% of those who are asymptomatic manifest sequelae, emphasizes the value and importance of early (before more severe symptoms emerge) detection and treatment.

ECONOMIC ASPECTS

The cost of hospital treatment for an uncomplicated case of lead poisoning is \$1,000 to \$2,000.⁴ This cost is infinitesimal when compared to the medical, educational, social and other costs involved in caring for a mentally-retarded individual throughout his life. The Department of Health, Education and Welfare estimates that a moderately brain damaged child needs about ten years of special education and care at a cost of \$1,750 per year.¹⁷ The estimated cost of treatment and institutionalization to the age of 60 of a person who incurs severe, permanent brain damage from lead poisoning in childhood is about \$220,000.¹⁸ Using the conservative figures of 800 children each year with severe cerebral damage and an estimated cost for each child of \$4,000 per year for institutional care, the annual cost is \$3,200,000.¹⁷

SUMMARY

Nationally, the incidence of symptomatic lead poisoning is estimated to be 10,000 to 20,000 cases per year. Of these cases, from 2,000 to 4,000 will have some form of neurologic sequelae and over 800 will suffer mental retardation of such severity that they will require institutionalization. Obviously, this is a problem of no small import. In Oklahoma, the problem is not as large, but it does exist and practitioners in areas where many buildings were constructed prior to and shortly after World War II should be sensitive to this problem and its consequences. Briefly, these consequences are that over 33% of the children so affected will display some form of chronic intellectual deficit and a like number may be emotionally disturbed. As was stated by Charney,⁴ "The number of cases found depends on how hard people look." □

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October 23rd, 24th, 25th, 1972

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MONDAY - October 23rd

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THEN - FREE TIME

TUESDAY - October 24th

DIABETES - THE OLD, THE YOUNG, THE PREGNANT

ROBERT F. BRADLEY, MD — Boston, Mass.
WILLIAM N. SPELLACY, MD — Miami, Florida
LUTHER B. TRAVIS, MD — Galveston, Texas

and THEN

WEDNESDAY - October 25th

DRUGS - USE, ABUSE, MISUSE

MERLIN W. KAMPFER, MD — Phoenix, Arizona
DONALD B. LOURIA, MD — Newark, N.J.
DAVID W. PAUL, MD — London, England
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Oklahoma Needs Consumer Health Education

MITCHELL V. OWENS, EdD

Many of our health problems, including auto accidents, drug addiction, VD, obesity, many cancers, etc., are a result of our lifestyle, ignorance or irresponsibility—possible solution—more consumer health education!

THE PRESIDENT'S Committee on Health Education was created by the President in September 1971, to recommend ways to develop, in the general public, a sense of "health consumer citizenship." The term health consumer is a relatively new term to the health arena, but one that we hear almost every time a group of health professionals gather. When health problems are enumerated, sooner or later the topic of discussion turns toward the need for consumer health education. But consumer health education is somewhat akin to Will Rogers' comment on the weather, in which he supposedly said, "everybody talks about the weather, but nobody does anything about it."

Most of the blame for the lack of consumer health education falls on the schools. However, consumer health education, or the lack thereof, is a complex problem that in-

volves the leadership in this country, especially those in leadership roles in the health service delivery system. To some extent, it gives an indication of their health goals and priorities. It either shows their lack of confidence in the educational process or, if I may suggest, an ignorance of what the process can achieve.

Those weary crusaders who have been in health education for a number of years realize that the term "consumer health education," is that same old health-education bed-fellow that we have been promoting for years, dressed-up in a new suit and, after all, the term is all encompassing since at one time or another we must all admit to being health consumers.

In Oklahoma our problems concerned with health education are such that one really wonders where to begin. However, they are essentially the same as those of our sister states in the mid and southwest. Basically, we do not have enough trained health education personnel to offer to those agencies, and/or groups who want to become involved in the process. The latest count indicates that we have only six trained community health educators employed in Oklahoma health professions and that not one of these is working at a community level. Three of the six are associated with the University of Oklahoma's College of Health, two are working at the state level, and the other one is

with the Indian Health Service Area Office. Consequently, very little health education information flows to the Oklahoma health consumer from this small pool of trained talent.

It appears that the principal source of health education activity in Oklahoma centers around the schools and the colleges, with some help coming from comprehensive health planning, voluntary and official health agencies, and from the private sector. However, when one examines and analyzes some of these activities, it becomes evident that there is cause for concern. For example, a recent health knowledge and behavior study conducted by the State Comprehensive Health Planning Agency in 98 Oklahoma schools involving 3,328 students, revealed some interesting results. Specifically, high school freshman and seniors, respectively, scored 32 and 28 percentile points below the national average. Sixth graders did somewhat better, however but still fell five percentile points below national averages. This disparity is undoubtedly the result of a multiplicity of factors, however, it most likely stems from the absence of a well planned health education curriculum in many schools (Oklahoma does not have a specific time allocation for health education in public schools) and the lack of qualified teachers of health education. Some of Oklahoma's universities and colleges do require a course and/or courses in health for education majors. However, to my knowledge only one offers anything resembling a major in health education, and it was designed for nurses presumably headed for a position in school health services. Several institutions do offer a degree in health and physical education, generally with emphasis on the physical aspects. Although the official and voluntary health agencies in the state have programs of health education, the State Department of Health is the only one from among this group that has a trained community health educator and it shares his services with another state agency.

It is too late to think about the past, but we can begin to plan for the present and future. Oklahoma has a multitude of health problems ranging from the high cost of health care to the fragmentation of health facilities and services. However, of overriding significance to these problems is the

matter of citizen awareness—awareness of good personal health practices and awareness of where to go and whom to see when health problems arise. We hear a great deal about the merits of Health Maintenance Organizations, and undoubtedly they do offer some hope for the future, however, little is said about the HMO's health education and health counseling components, and without them I foresee a continuation of most of the present health service delivery problems. The citizen must have adequate health knowledge to productively enter the health planning process if our health expectations for the future are to be achieved.

So, what does Oklahoma need in health education to help in solving its health problems? Simply, it needs planned, responsible health education programs with qualified personnel involved in the process. If we believe in the theory that good people make good programs, we can say that Oklahoma needs qualified health educators in schools. It needs qualified health educators working in the state and local health departments. It needs qualified health educators to help voluntary health agencies achieve their health education goals. It needs qualified health educators to manage health education and health education related programs in comprehensive health planning agencies, institutions of higher learning, and health care institutions. Indeed it needs qualified health educators to serve in all health and health related areas having need for personnel with professionally trained health education qualifications and talents.

Consequently, the future does appear bright for health education in Oklahoma if we can find qualified personnel. However,

Mitchell V. Owens, EdD, received his Doctorate in Education and School Health Services Administration from Columbia University in 1962. He is now Associate Professor in the Department of Health Administration, College of Health, University of Oklahoma Health Sciences Center. Doctor Owens is a member of the American Public Health Association, the American School Health Association, the International Union for Health Education and the Oklahoma Public Health Association.

this is our Waterloo unless we can somehow discover new and available resources. We in Oklahoma believe in the golden rule, that is "he who has the gold makes the rule." So, if we in higher education were making the rules, we would most likely place our emphasis on the training of health education personnel at the bachelor's level. We should train a person who could qualify as both a teacher of health education and as a community health educator, while continuing to recognize the need for a person with master's level training. The rationale for giving emphasis to the bachelor's level program is primarily one of economics and potential demand. Most of the present and future employment potential for health educators appears to fall in the bachelor level price range. For example, the Oklahoma voluntary health agencies either have or will have numerous positions requiring the talents of a trained health educator, however, at present they cannot afford the salary demanded by the qualified master's level person. This is probably also true of local health departments and others seeking the services of a trained health educator in the state.

Next, I would think short-term training funds should be made available for helping to upgrade the qualifications of those health educators and others presently employed in the field but needing additional educational

experiences to help in improving their proficiency. I would think a program offering a course such as health problems in contemporary society would be particularly attractive and useful to teachers of health education as well as to community health education practitioners.

Therefore, we believe that if we in higher education could be assured of student aid along with start-up money for planning and developing bachelor and graduate level programs of health education, we could get the job done. Unfortunately, money is one of the things that Oklahoma is in short supply of at present and I'm sure that a large share of any such funding would, by necessity, have to come from outside sources. Consequently, we look forward to hearing what the President's Committee has to recommend toward a solution. □

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ANNOUNCING—

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October 6th and 7th, 1972

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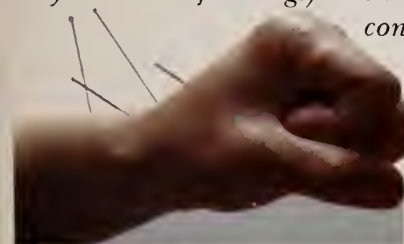
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**RECOMMENDATION OF THE PUBLIC HEALTH
SERVICE ADVISORY COMMITTEE ON IMMUNI-
ZATION PRACTICES—INFLUENZA VACCINE**



**News From
The Oklahoma State
Department of
Health**

INTRODUCTION

The effectiveness of the inactivated influenza vaccines is variable and their protection relatively brief. However, they are the only available preventives for influenza and should be given to the chronically ill and the elderly.

INFLUENZA VIRUS VACCINES

Influenza vaccine this year is different from that available in 1971-72. The type A 1971-72 strain is retained, but its potency has been increased from 400 to 700 CCA units. A more current B strain replaces the 1971-72 formulation. The adult dosage contains 300 CCA units of the new B strain. All 1972-73 vaccines are of the highly purified variety and should be less often associated with adverse reactions than previous vaccines.

VACCINE USAGE

Annual vaccination is recommended for persons who have chronic debilitating conditions: 1) Congenital and rheumatic heart diseases, especially mitral stenosis; 2) Car-

diovascular disorders with evidence of cardiac insufficiency; 3) Chronic bronchopulmonary diseases, such as asthma, chronic bronchitis, cystic fibrosis, bronchiectasis, emphysema, and advanced tuberculosis; 4) diabetes mellitus and other chronic metabolic disorders.

SCHEDULE

The primary series consists of two doses given subcutaneously six to eight weeks apart (dose volume and schedule details are specified in the manufacturer labeling). Persons who have had vaccine containing the Hong Kong antigen since 1968-69 need only a subcutaneous bivalent booster. Vaccination should be completed by mid-November.

PRECAUTIONS

Influenza vaccine should not be administered to persons clearly hypersensitive to egg protein, ingested or injected. □

COMMUNICABLE DISEASES IN OKLAHOMA FOR JULY, 1972

Disease	July '72	July '71	June '72	Total to Date	
				1972	1971
Amebiasis	2	4	3	19	38
Brucellosis	—	—	—	4	3
Chickenpox	2	5	8	133	184
Encephalitis, infect.	3	6	1	7	16
Gonorrhea+	948	575	818	5917	4158
Hepatitis, infect. & serum	58	89	79	460	430
Leptospirosis	—	—	—	1	1
Malaria	1	4	—	3	61
Meningococcal infections	—	1	—	6	5
Meningitis, aseptic	8	57	—	15	67
Mumps	1	5	3	147	190
Rabies in animals	21	6	19	218	236
Rheumatic fever	3	2	1	23	17
Rocky Mt. spotted fever	5	11	8	20	23
Rubella	1	8	2	34	60
Rubella, congenital syn.	—	—	—	—	—
Rubeola	—	10	—	8	787
Salmonellosis	10	38	13	78	115
Shigellosis	24	4	9	60	40
Syphilis+	82	69	100	676	740
Tetanus	1	1	—	1	1
Tuberculosis, new active	32	32	25	192	199
Tularemia	3	7	1	8	12
Typhoid fever	—	—	—	1	2
Whooping cough	6	8	5	18	16
Use Form ODH-231+					

OMPAC and AMPAC Set All-Time Record

Contributions setting an all-time record have been collected by the Oklahoma Medical Political Action Committee. OMPAC joined 11 other states setting new records and the result was that the American Political Action Committee has attained a record membership for the fifth consecutive year.

In a letter to the OMPAC Chairman Ed L. Calhoun, MD, AMPAC Board of Directors Chairman Hoyt D. Gardner, MD, said, "OMPAC and 11 other state PACs have surpassed their all-time high in number of contributors, and that's what put us over the top . . . we want everyone to know that the PAC movement in your state is bigger and better than ever."

Gardner went on to state, "I don't have to tell you that because AMPAC and your state PAC have done better than ever, that this is not the time to be complacent. Did you know that because of the nature of the presidential elections this year that dissident factions on the one hand, and over confident factions on the other hand, have walked away from financial and personal involvement in the race at the top of the ticket." He then went on to point out that organizations which usually go all out in the presidential race have conceded the election to Nixon and are now concentrating on congressional races, "those very races in which AMPAC and the state PACs have always given the most in effort and contributions. This means that medical candidate support activities must be greater than ever to withstand this new emphasis on congressional contests."

Other state PAC organizations to surpass previous record memberships include Arizona, Arkansas, District of Columbia, Florida, Maine, Massachusetts, Rhode Island, Tex-

as, South Carolina, Virginia, and West Virginia.

OMPAC's surge in growth is especially gratifying to one of AMPAC's newest board members, Rex E. Kenyon, MD, of Oklahoma City.

To further Oklahoma's participation in AMPAC and to promote OMPAC membership, in late August OSMA President Stanley R. McCampbell, MD, and OMPAC Chairman Ed L. Calhoun, MD, personally wrote every member of the association that was not a member of OMPAC.

In the letter, the two physicians urged their colleagues to join OMPAC by stating, "As physicians, our greatest ambition is to be left alone in order to give more and better medical care to sick people. Given the current political climate, however, we are not going to be left alone. We must enter the political arena. The choice is ours—to participate and win, or to be buried in a morass of government reports.

"OMPAC has been very active in the past and can be of much greater impact if more money is available in this election year. OMPAC was the single largest contributor to Senator Bellmon's campaign, for example, and by pooling our resources we can have a much greater impact. OMPAC must be a bipartisan effort since friends of medicine are not necessarily of one party. This contribution may be the most important thing that we can do this year to save American medicine," the letter said.

The letter went on to point out that other organizations contribute considerably more to legislative campaigns, in particular it has been reported that the chiropractors give nearly \$400 a year per member.

A regular membership in OMPAC is \$20 a year, while a sustaining

membership is \$99. The money contributed is administered by a 29-member Board of Directors—physicians and wives—representing all congressional districts. Appointments are made annually and no person may serve more than five years.

In the last presidential election year, 1968, OMPAC and AMPAC contributed \$32,700 to campaign funds of individual candidates. In that year OMPAC was involved in six national races and 31 state races. Of those supported, 87 percent were elected.

In the election year of 1970 OMPAC and AMPAC contributed \$20,980 to campaign funds of individual candidates. In that year OMPAC was involved in five national races and 39 state races. Of those supported, 80 percent were elected.

OMPAC was established in 1962 by physicians and others in order to win better legislative representation through effective political action. Its membership is open to all persons, not just physicians and their spouses. The organization is not affiliated with either major political party. Candidate support is dictated by the philosophy and platform of the individual candidate, not his party label.

Final decisions on candidate support are made by the OMPAC Board of Directors on recommendations received from regional OMPAC candidate selection committees. Funds are appropriated judiciously, after a careful analysis is made of all relevant factors. Every dime of OMPAC dues goes for direct candidate support. Promotional and administrative expenses and services are donated by interested OMPAC members.

Physicians interested in joining OMPAC should contact the Oklahoma Medical Political Action Committee in care of P. O. Box 75341, Oklahoma City, Oklahoma 73107.

Directors of OMPAC for 1972-73 are as follows:

Congressional District Number One—Harold W. Calhoun, MD; Harlan Thomas, MD; John T. Forsythe, MD; and George H. Camp, MD, all of Tulsa.

Congressional District 2—Elvin M. Amen, MD, Bartlesville; Tom S. Gafford, Jr., MD, Muskogee; Hillard E. Denyer, MD, Bartlesville; and Larry J. Hrdlicka, MD, Claremore.

Congressional District 3—Orange Welborn, MD, Ada; James Miller, MD, Ardmore; E. H. Shuller, MD, McAlester; and Royce McDougal, MD, Holdenville.

Congressional District 4—Paul Vann, MD, Lawton; James McDoniel, MD, Chickasha; Joe C. Horton, MD, Frederick; and Yale E. Parkhurst, MD, Norman.

Congressional District 5—Rex E. Kenyon, MD; J. R. Stacy, MD; Neil W. Woodward, MD; Kent Braden, MD, all of Oklahoma City.

Congressional District 6—William M. Leebron, MD, Elk City; Ed L. Calhoon, MD, Beaver; Joe B. Jarmon, Jr., MD, Enid; and Eugene H. Arrendell, MD, Ponca City.

Members at large—C. Riley Strong, MD, El Reno; Stanley R. McCampbell, MD, Oklahoma City; Mrs. Daniel R. Storts, Tulsa and Mrs. J. R. Stacy, Oklahoma City.

Mrs. Stacy is the secretary of the OMPAC Board of Directors. ☐

All Drugs To Be Registered Next Year

Next year, for the first time in history, the Food and Drug Administration may know the names, ingredients and manufacturers of every pharmaceutical preparation on the American market. In addition, it will have copies of the labeling and advertising materials associated with them.

A bill, HR-9936, calling for the registration of all drugs cleared the Senate Labor and Public Welfare Committee in June. Under the bill, which the House had passed earlier, FDA will get a semi-annual listing of all marketed drugs, both prescription and over the counter. A major objective of the bill is to make it possible to eliminate every product containing a harmful ingredient with a minimum of confusion and delay. ☐

OSMA Peer Review Function

I. PURPOSE:

The Peer Review Committee of the Oklahoma State Medical Association, and similar committees created by component societies of the state association, shall serve the function of seeking the objective reconciliation of unusual medical insurance claims involving members of the OSMA and health insurance coverages which offer payment of customary and reasonable fees.

II. ORGANIZATION:

A. *OSMA Committee*: The state association committee, to be appointed annually by the president, shall be comprised of a chairman, two vice-chairmen and at least twenty additional members selected geographically and by type of practice. At least one-half of the committee membership shall be retained from year to year in order to insure continuity of background and administrative capability.

The committee shall be divided into two groups of equal size, as explained in III B(2) of this policy statement, in order to equitably distribute the workload. Outside consultation will be utilized in the handling of specialized cases.

The state association committee shall work in cooperation with review committees appointed by county medical societies.

B. *County Society Committees*: Peer Review Committees appointed by county or district societies shall be comprised of a chairman and at least two additional members.

C. *Appointment and Tenure*: Personnel on the state association committee shall serve from June 1st each year until May 31st of the following year. County society committees shall serve on a calendar year basis.

D. *Quorum*: A quorum represented by a majority of committee members shall be required before any decision can be made by either the state or county committees. In the case of the state committee, which will be subdivided, a quorum will be a majority of the ten-man

group conducting the monthly meeting.

III. REVIEW PROCEDURE:

A. *Conditions Prerequisite to Peer Review*: The following conditions must be met prior to a case being submitted for medical review:

1. The coverage involved must provide for payment of customary and reasonable fees.

2. All other appropriate avenues of settlement must have been attempted by the carrier directly with the physician prior to requesting medical review, including either correspondence or telephone consultation, or personal visitation.

3. The patient (if applicable) and the physician (in every case) should be advised in writing by the carrier that there will be an administrative delay in final settlement of the claim. The letter to the patient should not include the statement that a review of charges or utilization is in process, but the physician should be advised by the carrier that the unusual nature of the claim requires its submittance for review by the Peer Review Committee.

4. A "Peer Review Summary" form must be completed by the carrier. In addition, one complete set of the claim forms in question and any other necessary medical record information should be furnished to the chairman of the OSMA committee, 601 N.W. Expressway, Oklahoma City, 73118.

B. *Review Process*:

(1) The state association committee shall routinely meet once each month throughout the year, except when the chairman may find it necessary to cancel a meeting.

(2) The subdivisions of the OSMA committee shall alternate on monthly meetings, thus committing each review team to a maximum of only six meetings a year. A vice-chairman shall preside over each meeting.

(3) When a properly filed and documented case is received by the OSMA committee chairman, he shall immediately schedule it for a specific date for hearing, provided that cases received less than fifteen days prior to the next scheduled meeting shall be deferred to the meeting

scheduled for the following month.

(4) Upon receipt of a case to be reviewed, the chairman of the OSMA committee shall promptly notify the involved physician and the chairman of the county society review committee that the case is scheduled for hearing at the OSMA level on a specific date. Both the involved physician and the chairman of the county society committee shall be furnished with complete copies of the materials which have been provided in documentation of the case, and both shall be invited to attend the committee hearing. The county society review committee shall be invited to furnish a written opinion on the problem to the state association committee prior to the scheduled meeting date.

(5) In addition to hearing and taking action on cases filed by carriers or insurance companies, the state association shall also receive cases filed by a member of the association against a carrier or insurance company, and cases by a patient against a physician where direct billing is involved. Again, notification to the interested parties shall be provided and documentation shall be required prior to the hearing.

(6) The state association committee shall have the obligation of finding in favor or against the amount of charges or the quantity and/or medical necessity of the services provided. If the decision of the state committee is in specific or general support of the allegations brought against a member of the association, it has the obligation of recommending a reasonable settlement.

Regardless of the committee's findings, interested parties shall be promptly notified.

C. Reciprocal Responsibility: The operation of the OSMA Peer Review Committee, as a peer review mechanism, can only be effective if its decisions are honored by the organizations or persons who are directly involved in the adjudication of questioned claims.

IV. DISCIPLINARY JURISDICTION:

The Peer Review Committee of the Oklahoma State Medical Association shall not function as a disciplinary body, but it does have the obligation to file charges with the association's Grievance Committee, or Board of Censors of a county medical society, when warranted by the circumstances of a particular case involving the conduct of an association member. □

Today's Rx: Patient Still Gets Better Buy Despite Price Rise

The retail charge for an average prescription rose slightly last year. But the patient still gets a better buy for his prescription dollar than he did even ten years ago. In fact, now it cost 12 cents less to purchase the same number of tablets or capsules contained in the average prescription than it did in 1961. The reason: The size of the typical prescription has increased more than the average prescription price; today it is one-third larger than the average of the early sixties.

These adjusted figures have more meaning now with physicians prescribing larger quantities of medicines, particularly for patients with chronic illness. Thus, today the patient pays less per dose since he makes fewer visits to the doctor and pharmacy. Additionally, in many instances, he is getting newer and more effective medicines.

These findings on changes in size and price are reported in a newly-revised PMA booklet based on the work of Doctor John M. Firestone, professor of economics at the City University of New York. In his report, Doctor Firestone has analyzed prices and quantities for over 1,200 medicines. Noting that the charge for the average prescription has risen steadily in recent times, Doctor Firestone demonstrates, in contrast, that when adjusted, for quantity changes, there has been a declining per tablet or capsule price trend for most of the period.

Expressed in comparative index numbers, with 1967 as "100" or the base, the value for 1961 was 105.5, declining regularly to 99.4 in 1968. Since that year there have been slow increases, rising to 102.3 in 1971, still

substantially below the rate of increase in the general cost of living. Before adjustment, the prescription charge was \$4.19 in 1971—up from \$4.02 in 1970, and \$3.26 in 1961. Adjusted to compensate for the size change, the average 1971 prescription cost \$3.71—down from \$3.83 in 1961.

These latest Firestone data, along with prescription price changes and trends as calculated by the Bureau of Labor Statistics of the U.S. Department of Labor, have been released in the revised 12-page booklet, "Rx Medicines and the Cost of Health Care." Individual copies are available on request for the PMA. □

PMA Recommends Physicians Be Consulted by BNDD

Practicing physicians should be consulted before the Bureau of Narcotics and Dangerous Drugs implements prescribing restrictions, according to the Pharmaceutical Manufacturers Association. PMA, representing most of the pharmaceutical manufacturing companies, made its comments in response to a new BNDD rule.

The new rule would outlaw prescriptions calling for the lesser of a 34-day supply or 100 doses of any substance under Schedule II of the BNDD drug abuse control. PMA said that since the cost of filling a number of prescriptions is greater than that incurred for one order, and since patients may be required to visit their physicians more often than necessary, in order to obtain the needed prescriptions, the rule would needlessly raise costs for legitimately needed medications.

In a recent news letter PMA stated, "While everyone agrees that adequate steps must be taken to avoid misprescribing or over prescribing of drug products that are subject to abuse, rules that will have the affect of inconveniencing patients and increasing prescription costs should first be studied with the assistance of the medical profession."

The association asked that the proposal be studied further before being made final. □



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Oklahoma County Spearheads Emergency Medical Change

A change in the emergency medical delivery system for Oklahoma City is being spearheaded by the Oklahoma County Medical Society. Plans are being drawn for a broad based emergency medical system which would enable emergency accident or heart attack victims to receive professional, physician-directed treatment during the crucial minutes while they are in route to the hospital.

John A. Blaschke, MD, President of the county medical society, started the project when he formed an organization known as CORP, Central Oklahoma Rescue Patrol. In a letter announcing the first meeting of CORP, Blaschke said, "Our stated ideal in this enterprise is to substantially upgrade the quality and character of emergency health delivery systems in the metropolitan Oklahoma City area . . .". CORP's purpose is to "study, initiate, create and substantially upgrade qualitatively and quantitatively the emergency medical care delivery system . . .".

The basic idea behind CORP would be to have a centrally dispatched emergency ambulance system with direct radio communications between the ambulance and the hospital. This would give the hospital an opportunity to prepare in advance for the delivery of an emergency victim. In addition, para medical personnel could be in each ambulance, trained and legally authorized to provide more than first aid to those victims needing it. These personnel could then be in radio contact with a physician who would direct treatment according to the para medical worker's description of the victim.

A formal proposal for a system change is being funded by the county medical society's Community Foundation. The proposal will be drawn up by Greg Harmon, Director of the Areawide Health Planning Organization, and his staff. The proposal will

cover the requirements of such a system, cost and recommendations on funding.

In other cities the local fire department has taken over such a program. The "Emergency" television series is based on a similar operation in Los Angeles, California. The city of Jacksonville, Florida has done more in this regard than any other.

In a newspaper interview, Harmon said, "In Jacksonville, they believe (the system) has reduced traffic accident deaths as much as 30 percent, and it only costs the residents about \$1.25 each, per year."

Cities closer to Oklahoma involved in this type of system include Dallas and Houston. The Houston Emergency Medical Delivery System was instituted on January 1st of this year and was promoted by the Harris County Medical Society. Dallas will start such a program on November 1st.

In a letter to CORP Chairman, Gene I. Everest, Oklahoma City Fire Chief Bryan Hollender said, "Again I re-emphasize my previous statement that at such time the city of Oklahoma City is forced into the ambulance service, the fire department is the only logical division of city government to operate this service." He then outlined three plans showing the cost of equipment, manpower salaries, maintenance, and re-occurring costs.

Chief Hollender closed his letter by stating, "If the opportunity is made available, the fire department stands ready to accept this responsibility and I am quite confident that we can provide one of the finest operations anywhere in the United States. Facilities are already available in existing fire stations and fire fighters are naturally trained for this type of work."

The CORP is a committee of citizens that includes representatives of a variety of organizations which are presently involved in emergency medical work. These include the Safety Council, Ambulance Association, Hospital Council, Police, Fire Department, Safety and Civil Defense, Health Department and the Oklahoma County Medical Society. □

Groom Resigns As ORMP Director

Oklahoma's Regional Medical Program Director, Dale Groom, MD, announced his resignation in a letter addressed to the Regional Advisory Group of the Program. Having been director of the program since it became operational in 1968, Groom stated his desire was to return to clinical, research and academic pursuits, and a basic wish "not to hang up my stethoscope."

Kelly M. West, MD, has been named acting director while the Regional Advisory Group conducts a search for someone to fill the post permanently.

During Doctor Groom's tenure as director, ORMP has implemented many innovative health projects including continuing education centers and teleconference networks, comprehensive programs of continuing education for every sector of the health care field, health manpower training and recruitment.

One of ORMP's notable achievements has been the establishment of the coronary care network which has attracted national recognition. □



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DONALD L. COOPER, MD

Cooper Named To AMA Sports Committee

Donald L. Cooper, MD, of Stillwater, has accepted membership on the AMA's Committee on the Medical Aspects of Sports. The invitation to serve was extended to him by the association's Board of Trustees.

Doctor Cooper is Director of the College Health Service for Oklahoma State University and has been extremely active in national medical sports programs for a number of years.

In his acceptance he said, "It will be a real honor for me to have a chance to work with this outstanding AMA committee. The men who have served and are presently serving have all made great contributions to the field of sports medicine."

Service on all councils and committees of the AMA is for one-year with a maximum length of service of ten years. □

Heart Research Money Goes To Oklahomans

Research grants to Oklahoma scientists totaling \$137,093 has been announced by the Oklahoma Heart Association. The funds are part of a record \$16 million allocated by the American Heart Association and its affiliates for heart research this year.

Research projects funded are de-

signed to give more information about heart disease, the nation's number one cause of death.

The Oklahoma Heart Association money went to twelve PhDs and MDs. In addition, the American Heart Association gave grants to MDs Irvin G. Endoss, and Edward D. Frohlich. Allen Spitler, MD, received a grant jointly funded through the Oklahoma and American Heart Associations.

Aid to finance 282 investigations has been made available by the American Heart Association that

amount to \$3.8 million. This is an addition to more than \$3 million in awards announced by AHA in April to support 167 fellowships. Also, state and community heart associations have contributed more than \$9 million to underwrite local research programs which emphasize support and encouragement for young investigators who show promise.

Since 1949, the American Heart Association and its affiliates have spent approximately \$195 million to advance scientific research in the heart and blood vessel diseases. □

DEATHS

D. W. HUMPHREYS, MD

1889-1972

D. W. Humphreys, MD, Cushing physician, died in Oklahoma City on June 30th, 1972. Born in Parnell, Missouri, Doctor Humphreys was graduated from Eclectic Medical School in Cincinnati, Ohio, in 1913. The same year he established his first medical practice in Owasso, Oklahoma. Following World War I, he moved to Oilton and later to Sperry before beginning his practice in Cushing in 1945.

In 1963, Cushing citizens named a special day for Doctor Humphreys in celebration of his fiftieth year in medical practice. The same year, the OSMA presented him with a Fifty Year Pin in recognition of his service to his profession.

MERL C. CLIFT, MD

1896-1972

A Blackwell physician since 1923, Merl C. Clift, MD, died August 1st, 1972. Doctor Clift had been retired about four years. A native of Agnew, Nebraska, he was graduated from the University of Oklahoma College of Medicine in 1923. He originally established a general practice, however, he later specialized in general surgery, following postgraduate study at Johns Hopkins University, in Europe and Scotland.

HUGH H. MATHEWS, MD

1914-1972

An Enid physician since 1954, Hugh H. Mathews, MD, died July 13th, 1972. Born in Hoyt, Kansas, Doctor Mathews graduated from the St. Louis University School of Medicine in 1941. Following his residency training in radiology, he entered practice in Topeka, Kansas, before coming to Enid. He served with the medical corps during World War II.

DONALD G. CLEMENTS, MD

1923-1972

Tulsa radiologist, Donald G. Clements, MD, 48, died August 12th, in Vail, Colorado, where he was attending the 25th reunion of his medical school graduating class.

A native of Hennessey, Oklahoma, Doctor Clements was graduated from the University of Oklahoma College of Medicine in 1947. Following residency training in radiology, Doctor Clements established his practice in Tulsa. He was a member and diplomat of the American College of Radiology. □

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OMRF Lecture Scheduled

Eugene A. Stead, Jr., MD, Florence McAlister Professor of Medicine, Duke University, will present the first lecture of the 1972-1973 Lecture Series sponsored by the Oklahoma Medical Research Foundation.

Doctor Stead's lecture, entitled "Death with Dignity," will be given at 4:00 p.m., October 3rd, 1972, in the East and West Lecture Halls of the University of Oklahoma Health Sciences Center's Basic Science Education Building, 11th Street and Kelley Avenue, North Entrance, Oklahoma City.

The Oklahoma Medical Research Foundation Lecture Series was established in July, 1971, by the Foundation's Board of Directors as a means of providing a valuable service to practicing physicians throughout the state as well as the teaching staff, research scientists, and students at the University of Oklahoma Health Sciences Center. The idea for the series was brought about by the Foundation's late president, Colin M. MacLeod, MD, who was one of the country's prominent leaders in science and education.

Other lectures scheduled to complete the 1972-1973 series will be presented by the following: Francis D. Moore, MD, Moseley Professor of Surgery, Harvard Medical School, February 6th, 1973; Howard Rasmussen, MD, PhD, Department of Biochemistry, University of Pennsylvania, April 3rd, 1973, and Sol Spiegelman, PhD, Director of the Institute of Cancer Research, Professor of Human Genetics and Development, College of Physicians and Surgeons, Columbia University, May 1st, 1973.

Further information may be obtained from James W. Hampton, MD, Chairman, Lecture Series Committee, Oklahoma Medical Research Foundation, 825 N. E. 13th Street, Oklahoma City, Oklahoma 73104.

Other Committee members are John R. Sokatch, PhD, and G. Rainey Williams, MD, University of Oklahoma Health Sciences Center; Reagan H. Bradford, MD, and Joseph A. Ontko, PhD, Oklahoma Medical Research Foundation. □

Hospital Expenses Going Up . . . Slowly

Expenses in the nation's community hospitals rose at a significantly slower rate than in any previous year since 1966 according to recent statistics from the American Hospital Association. Community hospital expenses rose 14.5 percent during 1971, compared to 17.7 percent in 1970.

Community hospitals comprise 82.6 percent of all hospitals, and account for 92.3 percent of all patients admitted during 1971.

The cost of caring for a hospital patient for one day (cost per patient day) increased from \$81.01 in 1970 to \$92.31 in 1971, making a 13.9 percent increase in that year. At the same time payroll expenses also rose at a slower rate, 14.3 percent in 1971 as compared to 16.4 percent in 1970.

The slow down in expenses and costs was not due to the wage and price freeze in Phase II of the Economic Stabilization Program, since those controls went into effect only shortly before the end of the 1971 survey period, September 1st, 1971.

The acting president of the AHA said, "These statistics show graphically that hospitals, through their own efforts, have been able to slow the rate of increase and expenses, and although the Economic Stabilization Program instituted following this survey, has put extreme financial strains on health care institutions, they are continuing to do an outstanding job of containing costs..."

The American Hospital Association annually surveys the nation's 7,000 registered hospitals, and then produces a nearly complete compilation of hospital statistics.

In 1971 over 2.6 million people were fulltime employees of hospitals. The number of hospital employees per 100 patients was 301 in 1971 . . . a little over three employees for each patient.

Nearly half the community hospitals in the nation, 48 percent, now have intensive cardiac care units, while 51.9 percent have intensive care units. Four hundred thirteen hospitals have a capability of open heart surgery. □

Two Receive Rural Medical Scholarships

Two first-year medical students have been named to receive special scholarships from the Oklahoma Foundation for Community Medical Care. The foundation, formed one year ago by the Oklahoma State Medical Association, awards scholarships to medical students willing to practice in rural communities.

The two winners, John D. Ferguson and John C. Sayre each received \$2,500 scholarships. A condition of the scholarship is that the recipient agrees to practice medicine in a needy part of the state after they have completed their training. The foundation currently has five students in the O. U. Medical School obligated to practice in this manner.

Ferguson was born in Vernon, Texas, in 1947. He graduated from Davison High School, Davison, Oklahoma, and then attended Oklahoma Christian College in Oklahoma City and completed his bachelor of science degree. In 1968 he entered the University of Oklahoma Health Sciences Center and is completing his PhD.

In his application he stated that he was interested in rural practice because, "Having lived in the country and being associated with rural people, I feel I can greater appreciate the opportunities available while also getting a certain amount of self-satisfaction out of being able to return to the country."

John Sayre is a native Oklahoman born in Pawnee. He attended Pawnee High School and completed his pre-medical work at Oklahoma State University, Stillwater.

Sayre's application stated, "In a rural practice, the advantage of knowing the patient's background is enhanced. The doctor not only ministers to the health needs of the community, but he is also a confidant, friend, and then a guest. As a result of the more intimate atmosphere of the small town, the doctor is not only aware of a particular person's personal history and idiosyncrasies, but those of his family as well." □

McC Campbell Names Regents Liaison Committee

OSMA President Stanley R. McC Campbell, MD, has named a special liaison committee to the Oklahoma State Regents for Higher Education. The new five-member committee will provide counsel and advice to the regents on plans and activities involving the O. U. College of Medicine.

Chairman of the new committee is Robert J. Hogue, MD, Guthrie. Other members include Ed Calhoon, MD, Beaver; M. Joe Crosthwait, MD, Midwest City; C. S. Lewis, Jr., MD, Tulsa; and Bob J. Rutledge, MD, Oklahoma City. All of these men have a particular interest in medical education.

In a letter acknowledging the new committee Chancellor E. T. Dunlap stated, "The purpose of the committee is to communicate directly with the state regents and the chancellor regarding plans and activities for the development of the branch program operation of the University of Oklahoma College of Medicine in Tulsa designed to implement Senate Bill #453 of the 1972 Oklahoma Legislature. So, it is hoped that the group will provide counsel and advice to the state regents and make available any information pertinent to the subject that might be useful in planning for development of the Tulsa program."

The committee's first meeting with the Board of Regents was held on August 23rd. At that time President McC Campbell expressed the thought that the OSMA was interested in seeing a branch school developed in Tulsa and emphasized that it should be a school to train MDs rather than a free standing school of osteopathy. He went on to point out that the OSMA supports medical education so long as it is of high quality and comparable to medical education in any school. He also stressed that the existing program of the Oklahoma Health Sciences Center should be adequately financed. □

Book Reviews

HEALERS IN UNIFORM. Edward Edelson. New York: Doubleday & Company, Inc. 184 pp. \$3.95.

This small book describes, in biographical fashion, twelve military medical officers who served in the United States Armed Forces. It begins with the story of Doctor Benjamin Rush and ends with John Paul Stapp, the Air Force medical officer who has pioneered in the study of automotive crashes. It also has chapters concerned with Walter Reed and the conquest of yellow fever, Bailey K. Ashford who found the cause of hookworm disease, Oswald H. Robertson who established the first blood bank, and John Shaw Billings, who established the National Library of Medicine. Perhaps the most interesting story of all is that of the U. S. Army's fight against typhus in Italy during World War II. —Harris D. Riley, Jr., MD

TEACHING THE VISUALLY LIMITED CHILD by Virging E. Bishop, Coordinator, Vision Program Services, Chester County Public School, West Chester, Pennsylvania. Charles C. Thomas, Publisher. Springfield, Illinois, 1971. 214 pp.

This book is an excellent attempt to assist teachers in their endeavor to train and help the child with restricted vision. Too often it is easy to pass this child along hoping that it will get the training on its own, or someone else will fill the gaps.

Hopefully, a lay description of visual defects will help the teacher better understand the problems involved. From statistics it was quite apparent that adequate visual screening has not been reached throughout the United States.

The visually limited child must depend on other sensory skills, particularly listening. Suggestions to encourage motivation along this line are most important. An outline of progress that should be expected by certain grades with directions to attain this should be useful. Directions for teaching typing are programmed as this becomes the important line of communication.

In line with the thought that an

educated visually limited person does not always make a productive one, important suggestions are made in regards to guidance.

At the end is an extensive reference of devices and literature to further assist the teacher.—Robert W. King, MD

THE PEOPLE'S HEALTH: ANTHROPOLOGY AND MEDICINE IN A NAVAJO COMMUNITY. John Adair, PhD and Kurt W. Deuschle, MD (editors). New York: Appleton - Century - Crofts, 1970. 190 pp.

This small book details the experiences, problems and conclusions of the Navajo-Cornell Field Health Research Project in which a physician, Kurt W. Deuschle, and an anthropologist, John Adair, joined forces to design and administer an experimental health program on a Navajo reservation. The Navajo - Cornell Field Health Research Project was organized jointly by the Navajo Tribe, Cornell University Medical College, and the U. S. Public Health Service, in 1955, when the responsibility for the health of the U. S. Indian was transferred from the Department of the Interior to the Department of Health, Education and Welfare. The stated purposes were: To develop effective methods for the delivery of modern medical services to the Navajo people; to see to what extent the knowledge so acquired would have generality for the people in similar socioeconomic circumstances elsewhere; to study discrete disease entities with particular reference to their possible shaping by Navajo culture; and to explore whether the sudden apposition of modern biomedical science and technology and the disease pattern of a "nontechnologic" society could provide knowledge of value in the attack on contemporary U. S. medical problems.

The book contains nine chapters, a section entitled "Conclusion," and three appendices. It reviews the Navajo view of health and disease, the physician's view of health and disease, and the converging of the

two views. Other chapters are concerned with introduction of the project to the community, the training of Navajo health workers and developing a cross-cultural approach to bridge the gap of language and culture and to bring improved medical care to this remote desert people, most of which took place at Many Farms Clinic. There is a chapter by Clifford R. Barnett, an anthropologist, and David L. Rabin, a physician, dealing with various aspects of congenital hip disease, a disorder which has a strikingly high prevalence in the Navajos (230/10,000 case rate as opposed to the case rate of 13/10,000 in the remainder of the population).

Physicians and others in the health fields, particularly those with an interest in the American Indian, will find this book of interest.—*Harris D. Riley, Jr., MD*

MEDICINE AND STAMPS. Edited by R. A. Kyle and M. A. Shampo. Published by the American Medical Association. 216 pp. \$1.00.

At first glance it would appear that this book would be of primary interest for philatelists; however, it is filled with information about medical history. The editors are staff members of the Mayo Clinic and are philatelists interested in stamps which concern medicine. The book is arranged alphabetically beginning with a discussion of Angel Arturo Aballi, father of the well-known pediatrician in this country, who was a Cuban fighter for the rights of children and medicine against hostile political regimes. There follow short biographical vignettes of more than 150 physicians who have been immortalized on stamps of 53 different countries. These include Hippocrates, the Greek father of medicine; Pasteur; Robert Koch; von Behring; and many other well-known physicians. Readers will be interested to learn that France has memorialized Corvisart, the physician to Napoleon Bonaparte, and that Igenhousz, a Dutch physician, carried out smallpox vaccination in the family of Empress Maria Theresa of Austria in 1778. It is rather surprising to learn that Edward Jenner,

the developer of smallpox vaccination, has not been honored.

The Table of Contents gives a breakdown of the country issuing stamps. France leads with 25, followed by Austria with 13, the Netherlands with nine, Belgium with eight; and the United States has six.

Although the book is published by the American Medical Association, I would take issue with the title of the biographical sketch of William Crawford Gorgas—"AMA President-Canal Builder"—and would suggest that his leadership in the construction of the Panama Canal was substantially more meaningful than his presidency of the American Medical Association.

This is an attractive little book. Many of the stamps are shown in color and all are identified by number from Scott's Standard Postage Stamp Catalogue. One of the attractive aspects is that it costs only \$1.00.—*Harris D. Riley, Jr., MD*

RADIOLOGIC ATLAS OF PULMONARY ABNORMALITIES IN CHILDREN. Edward B. Singleton and Milton L. Wagner. Philadelphia: W. B. Saunders Company. 1971. 251 pp.

This new book in the form of a radiologic atlas attests to the growing attention being devoted to and the importance of respiratory diseases in infants and childhood. The authors are pediatric radiologists at the Texas Children's Hospital in Houston.

The book is divided into eight chapters following a brief introduction. The first two chapters discuss techniques for obtaining chest roentgenograms and other pulmonary or radiologic studies and the radiologic timings which are normal. The subsequent chapters are entitled, "Primary Pulmonary Diseases Producing Respiratory Distress in the Newborn and Young Infant" which covers such disorders as transient tachypnea of the newborn, respiratory distress syndrome, aspiration syndrome, Wilson-Mikity syndrome and other disorders which are peculiar to the neonate and young infant. There is a chapter on "me-

chanical" abnormalities such as esophageal atresia, tracheoesophageal fistula, congenital lobar emphysema and others. The largest chapter is one dealing with pulmonary infections in infants and young children. This is quite up-to-date with coverage of such rare disorders as desquamative interstitial pneumonia. There are also chapters dealing with pulmonary tumors which includes a discussion of bronchogenic cysts, pulmonary vascular diseases and one which deals with miscellaneous pulmonary disorders with coverage of such disorders as pulmonary alveolar microlithiasis, pulmonary alveolar proteinosis, and the roentgenographic findings in collagen diseases and trauma.

Each section includes a brief discussion of the clinical aspects of the disorder followed by more detailed discussion of the radiologic findings. As in any atlas, there are numerous photographs, chiefly reproductions of roentgenograms, which, in general, are of good quality, although some are rather light in their reproduction. Each chapter has references which are conveniently divided according to the disease entity and are generally up-to-date and emphasize the radiologic aspects.

This is a readable and useful book for pediatricians and pediatric radiologists, and will be of value to all physicians who deal with children.—*Harris D. Riley, Jr., MD*

THE FAMILY AND ITS FUTURE: A CIBA FOUNDATION SYMPOSIUM. Edited by Katherine Elliott. CIBA Foundation, 104 Gloucester Place, London, England. First Edition, hard cover, 230 pp. with 17 illustrations. London: J and A Churchill, 1970.

This volume is a collection of papers presented by participants at a three-day conference held in London in 1970 to discuss the widely ranging topic of The Family and Its Future. Since the conferees represented many countries and disciplines, the content, writing style and scientific language of the thirteen chapters that make up this volume range widely. Each paper is fol-

lowed by a discussion among the participants. The value of these discussions to the reader is variable as they range from arguments over details, differences in points of view, to the presentation of further data. The chairman's overview of the conference, as well as his own views, comprise the final chapter.

The conference focused primarily on the family in Western cultures and the papers enumerated a number of factors and processes which are likely to influence the future pattern of the family, such as demography, law, environmental plan-

ning, fertility control, increased longevity and the role of women. Although the diversity of the conference provided the opportunity to view the family from an interdisciplinary perspective, the papers and discussions were quite narrowly restricted to the traditional approaches of each discipline. Little was said about the interrelationships of factors as they influence the family as a unit or as they mold different types of family patterns in different cultures within the Western world. The effects of various types of living arrangements such as communes or the Kibbutz on familial roles and child development and the impact of

technology on changing traditional family patterns were not discussed. While there was general consensus that the family pattern is changing in the Western world, the participants were cautious about discussing the directions and future consequences of these changes.

The purpose of conferences of this type are often vague and the topic too broad to accomplish more than the interchange of ideas. Certainly this conference did not reveal any new insights into the family of the future and addressed itself to issues that are better and more fully discussed in already available sources.

—John G. Bruhn, PhD ☐

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Call it what you will, it maybe premalignant..

Before

3/29/67 Before therapy with 5%-FU cream. Patient P. T. shows a moderately severe solar keratotic involvement. Note residual scarring from the previous cryosurgical and electrosurgical procedures on forehead and ridge of nose adjacent to periauricular area.

After

6/12/67 Seven weeks after cessation of therapy. Reactions have subsided. Residual scarring is not seen except for that due to prior surgery. Inflammation has disappeared and face is clear of keratotic lesions.





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and Efudex® (fluorouracil) 5% cream can resolve it.

**Call it actinic, solar or senile keratoses,
many regard it as "precancerous."^{1,2}**

Topical fluorouracil, considered by some dermatologists to be a major advance in the treatment of multiple solar keratoses,^{3,4} offers the physician a relatively inexpensive alternative to cryosurgery, electrodesiccation and cold knife surgery. Of the topical fluorouracils available, only Efudex offers 2% and 5% solution and 5% cream formulations—formulations that have proved effective in the treatment of these multiple lesions.

Usual duration of therapy, 2 to 4 weeks.

Studies showed that with the 2% and 5% Efudex preparations, the usual duration of therapy was only 2 to 4 weeks.⁵ Other studies with topical fluorouracil revealed that when concentrations of less than 2% were used, significant numbers of lesions recurred.⁶

Treats the lesions you can't see, too.

Numerous lesions, not apparent prior to 2% and 5% Efudex therapy, manifested themselves by definite reactions, while intervening skin remained relatively unaffected.⁵ The early eradication of these subclinical lesions (which may otherwise have undergone further progression) probably accounts for the reduced incidence of future solar keratoses in patients treated with topical fluorouracil—especially with 5% concentrations.⁶

How to identify solar keratoses.

Typically, the lesion—a flat or slightly elevated brown to red-brown papule—is dry, rough, adherent and sharply defined. Multiple lesions are the rule.

Predictable therapeutic response.

The response to a typical course of Efudex therapy is usually characteristic and predictable. After 3 or 4 days of treatment, erythema begins to appear in the area of keratoses. This is followed by a moderate to intense inflammatory response, scaling and occasionally moderate tenderness or pain. The height of this response generally occurs two weeks after the start of therapy and then begins to subside as treatment is stopped. Within two weeks of discontinuing medication, the inflammation is usually gone. Lesions that do not respond should be biopsied.

References: 1. Allen, A. C.: *The Skin, A Clinicopathological Treatise*, ed. 2, New York, Grune & Stratton, 1967, p. 842. 2. Dillaha, C. J.; Jansen, G. T. and Honeycutt, W. M.: "Treatment of Actinic Keratoses with Topical Fluorouracil," in Waisman, M. (ed.): *Pharmaceutical Therapeutics in Dermatology*, Springfield, Ill., Charles C Thomas, 1968, p. 92. 3. Belisario, J. C.: *Cutis*, 6:293, 1970. 4. Sams, W. M.: *Arch. Derm.*, 97:14, 1968. 5. Data on file, Hoffmann-La Roche Inc., Nutley, New Jersey. 6. Williams, A. C., and Klein, E.: *Cancer*, 25:450, 1970.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Multiple actinic or solar keratoses.

Contraindications: Patients with known hypersensitivity to any of its components.

Warnings: If occlusive dressing used, may increase inflammatory reactions in adjacent normal skin. Avoid prolonged exposure to ultraviolet rays. Safe use in pregnancy not established.

Precautions: If applied with fingers, wash hands immediately. Apply with care near eyes, nose and mouth. Lesions failing to respond or recurring should be biopsied.

Adverse Reactions: Local—pain, pruritus, hyperpigmentation and burning at application site most frequent; also dermatitis, scarring, soreness and tenderness. Also reported—insomnia, stomatitis, suppuration, scaling, swelling, irritability, medicinal taste, photosensitivity, lacrimation, leukocytosis, thrombocytopenia, toxic granulation and eosinophilia.

Dosage and Administration: Apply sufficient quantity to cover lesion twice daily with nonmetal applicator or suitable glove. Usual duration of therapy is 2 to 4 weeks.

How Supplied: Solution, 10-ml drop dispensers—containing 2% or 5% fluorouracil on a weight/weight basis, compounded with propylene glycol, tris(hydroxymethyl)amino-methane, hydroxypropyl cellulose, parabens (methyl and propyl) and disodium edetate.

Cream, 25-Gm tubes—containing 5% fluorouracil in a vanishing cream base consisting of white petrolatum, stearyl alcohol, propylene glycol, polysorbate 60 and parabens (methyl and propyl).



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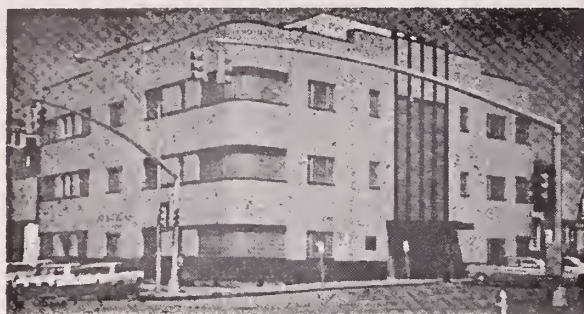
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The JOURNAL

of the Oklahoma State Medical Association

DEADLINES

January Issue

Editorial, Scientific, Book Reviews	November 15, 1972
Advertising Copy	December 15, 1972
News Copy, Miscellaneous Ads	January 1, 1973

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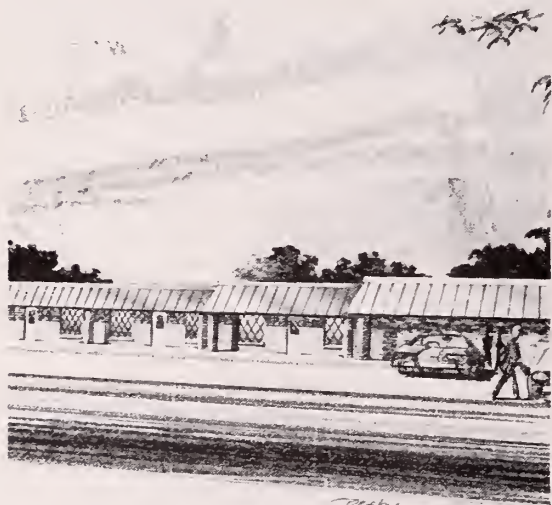
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CAUTION: Federal law prohibits dispensing without prescription.

Indications: Pre-Sate (chlorphentermine hydrochloride) is indicated in exogenous obesity, as a short term (i.e., several weeks) adjunct in a regimen of weight reduction based upon caloric restriction.

Contraindications: Glaucoma, hyperthyroidism, pheochromocytoma, hypersensitivity to sympathomimetic amines, and agitated states. Pre-Sate (chlorphentermine hydrochloride) is also contraindicated in patients with a history of drug abuse or symptomatic cardiovascular disease of the following types: advanced arteriosclerosis, severe coronary artery disease, moderate to severe hypertension, or cardiac conduction abnormalities with danger of arrhythmias. The drug is also contraindicated during or within 14 days following administration of monoamine oxidase inhibitors, since hypertensive crises may result.

Warnings: When weight loss is unsatisfactory the recommended dosage should not be increased in an attempt to obtain increased anorexic effect; discontinue the drug. Tolerance to the anorectic effect may develop. Drowsiness or stimulation may occur and may impair ability to engage in potentially hazardous activities such as operating machinery, driving a motor vehicle, or performing tasks requiring precision work or critical judgment. Therefore, such patients should be cautioned accordingly. Caution must be exercised if Pre-Sate (chlorphentermine hydrochloride) is used concomitantly with other central nervous system stimulants. There have been reports of pulmonary hypertension in patients who received related drugs.

Drug Dependence: Drugs of this type have a potential for abuse. Patients have been known to increase the intake of drugs of this type to many times the dosages recommended. In long-term controlled studies with high dosages of Pre-Sate, abrupt cessation did not result in symptoms of withdrawal.

Usage In Pregnancy: The safety of Pre-Sate (chlorphentermine hydrochloride) in human pregnancy has not yet been clearly established. The use of anorectic agents by women who are or who may become pregnant, and especially those in the first trimester of pregnancy, requires that the potential benefit be weighed against the possible hazard to mother and child. Use of the drug during lactation is not recommended. Mammalian reproductive and teratogenic studies with high multiples of the human dose have been negative.

Usage In Children: Not recommended for use in children under 12 years of age.

Precautions: In patients with diabetes mellitus there may be alteration of insulin requirements due to dietary restrictions and weight loss. Pre-Sate (chlorphentermine hydrochloride) should be used with caution when obesity complicates the management of patients with mild to moderate cardiovascular disease or diabetes mellitus, and only when dietary restriction alone has been unsuccessful in achieving desired weight reduction. In prescribing this drug for obese patients in whom it is undesirable to introduce CNS stimulation or pressor effect, the physician should be alert to the individual who may be overly sensitive to this drug. Psychologic disturbances have been reported in patients who concomitantly receive an anorectic agent and a restrictive dietary regimen.

Adverse Reactions: **Central Nervous System:** When CNS side effects occur, they are most often manifested as drowsiness or sedation or overstimulation and restlessness. Insomnia, dizziness, headache, euphoria, dysphoria, and tremor may also occur. Psychotic episodes, although rare, have been noted even at recommended doses. **Cardiovascular:** tachycardia, palpitation, elevation of blood pressure. **Gastrointestinal:** nausea and vomiting, diarrhea, unpleasant taste, constipation. **Endocrine:** changes in libido, impotence. **Autonomic:** dryness of mouth, sweating, mydriasis. **Allergic:** urticaria. **Genitourinary:** diuresis and, rarely, difficulty in initiating micturition. **Others:** Paresthesias, sural spasms.

Dosage and Administration: The recommended adult daily dose of Pre-Sate (chlorphentermine hydrochloride) is one tablet (equivalent to 65 mg chlorphentermine base) taken after the first meal of the day. Use in children under 12 not recommended.

Overdosage: **Manifestations:** Restlessness, confusion, assaultiveness, hallucinations, panic states, and hyperpyrexia may be manifestations of acute intoxication with anorectic agents. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension, or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Fatal poisoning usually terminates in convulsions and coma.

Management: Management of acute intoxication with sympathomimetic amines is largely symptomatic and supportive and often includes sedation with a barbiturate. If hypertension is marked, the use of a nitrate or rapidly acting alpha-receptor blocking agent should be considered. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendations in this regard.

How Supplied: Each Pre-Sate (chlorphentermine hydrochloride) tablet contains the equivalent of 65 mg chlorphentermine base; bottles of 100 and 1000 tablets.

Full Information available on request.



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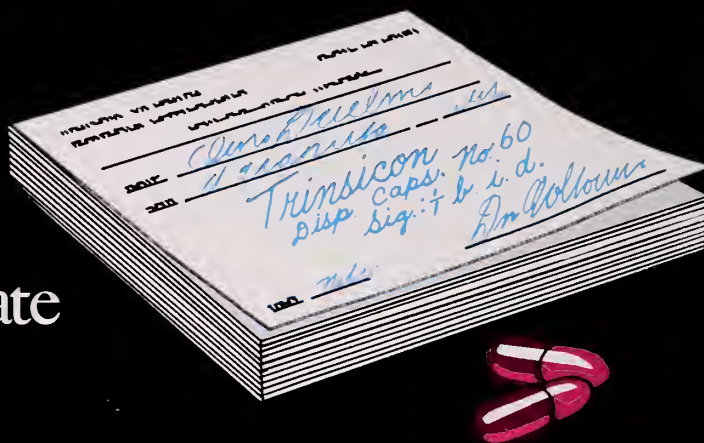
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with Intrinsic Factor

(See reverse side for prescribing information.)

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Description: Each Pulvule® contains—

Special Liver-Stomach Concentrate, Lilly

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Cobalamin Concentrate, N.F., equivalent to Cobalamin 7.5 mcg.

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Iron, Elemental (as Ferrous Fumarate) 110 mg.

Ascorbic Acid (Vitamin C) 75 mg.

Folic Acid 0.5 mg.

Indications: Trinsicon is a multifactor preparation effective in the treatment of anemias that respond to oral hematinics, including pernicious anemia and other megaloblastic anemias and also iron-deficiency anemia. Therapeutic quantities of hematopoietic factors that are known to be important are present in the recommended daily dose.

Vitamin B₁₂ with Intrinsic Factor—When secretion of intrinsic factor in gastric juice is inadequate or absent (e.g., in Addisonian pernicious anemia or after gastrectomy), vitamin B₁₂ in physiological doses is absorbed poorly, if at all. The resulting deficiency of vitamin B₁₂ leads to the clinical manifestations of pernicious anemia. Similar megaloblastic anemias may develop in fish tapeworm (*Diphyllobothrium latum*) infection or after a surgically created small-bowel blind loop; in these situations, treatment requires freeing the host of the parasites or bacteria which appear to compete for the available vitamin B₁₂. Strict vegetarianism and malabsorption syndromes may also lead to vitamin B₁₂ deficiency. In the latter case, parenteral therapy, or oral therapy with so-called massive doses of vitamin B₁₂, may be necessary for adequate treatment of the patient.

Potency of intrinsic factor concentrates is determined physiologically, i.e., by their use in patients with pernicious anemia. The liver-stomach concentrate with intrinsic factor and the vitamin B₁₂ contained in two Pulvules Trinsicon provide 1½ times the minimum amount of therapeutic agent which, when given daily in an uncomplicated case of pernicious anemia, will produce a satisfactory reticulocyte response and relief of anemia and symptoms.

Concentrates of intrinsic factor derived from hog gastric, pyloric, and duodenal mucosa have been used successfully in patients who lack intrinsic factor. For example, Fouts *et al.* maintained patients with pernicious anemia in clinical remission with oral therapy (liver extracts or intrinsic factor concentrate with vitamin B₁₂) for as long as twenty-nine years.

After total gastrectomy, Ficarra found multifactor preparations taken orally to be "just as effective in maintaining blood levels as any medication that has to be administered parenterally." His study was based on twenty-four patients who had survived for five years after total gastrectomy for cancer and who had been taking two Pulvules Trinsicon daily.

Folic Acid—Folic acid deficiency is the immediate cause of most, if not all, cases of nutritional megaloblastic anemia and of the megaloblastic anemias of pregnancy and infancy; usually, it is also at least partially responsible for the megaloblastic anemias of malabsorption syndromes, e.g., tropical and nontropical sprue.

It is apparent that in vitamin B₁₂ deficiency (e.g., pernicious anemia), lack of this vitamin results in impaired utilization of folic acid. There are other evidences of the close folic acid-vitamin B₁₂ interrelationship: (1) B₁₂ influences the storage, absorption, and utilization of folic acid, and (2), as a deficiency of B₁₂ progresses, the requirement for folic acid increases. However, folic acid does not change the requirement for vitamin B₁₂.

Iron—A very common anemia is that due to iron deficiency. In most cases, the response to iron salts is prompt, safe, and predictable. Within limits, the response is quicker and more certain to large doses of iron than to small doses.

Each Pulvule Trinsicon furnishes 110 mg. of elemental iron (as ferrous fumarate) to provide a maximum response.

Ascorbic Acid—Vitamin C plays a role in anemia therapy. It augments the conversion of folic acid to its active form, folinic acid. In addition, ascorbic acid promotes the reduction of ferric iron in food to the more readily absorbed ferrous form. Severe and prolonged vitamin C deficiency is associated with an anemia which is usually hypochromic but occasionally megaloblastic in type.

Contraindications and Precautions: Anemia is a manifestation that requires appropriate investigation to determine its cause or causes.

Folic acid *alone* is unwarranted in the treatment of pure vitamin-B₁₂-deficiency states, such as pernicious anemia. Indeed, the use of folic acid in large doses in pernicious anemia without adequate vitamin B₁₂ may result in hematologic remission but neurological progression.

As with all preparations containing intrinsic factor, resistance may develop in some cases of pernicious anemia to the potentiation of absorption of physiological doses of vitamin B₁₂. If resistance occurs, parenteral therapy, or oral therapy with so-called massive doses of vitamin B₁₂, may be necessary for adequate treatment of the patient. No single regimen fits all cases, and the status of the patient observed in follow-up is the final criterion for adequacy of therapy. Periodic clinical and laboratory studies are considered essential and are recommended.

In extremely rare instances, skin rash suggesting allergy has been noted following the oral administration of liver-stomach material. Allergic sensitization has been reported following both oral and parenteral administration of folic acid.

Hemochromatosis and hemosiderosis are contraindications to iron therapy.

Adverse Reactions: In rare instances, iron in therapeutic doses produces gastrointestinal reactions, such as diarrhea or constipation. Reducing the dose and administering it with meals will minimize these effects in the iron-sensitive patient.

Dosage: One Pulvule twice a day. (Two Pulvules daily produce a standard response in the average uncomplicated case of pernicious anemia.)

How Supplied: Pulvules Trinsicon® (hematinic concentrate with intrinsic factor, Lilly), in bottles of 60 and 500 and in Identi-Dose® (unit dose medication, Lilly) in boxes of 100.

[000007]

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Indications: Stable adult diabetes mellitus; sulfonylurea failures, primary and secondary; adjunct to insulin therapy of unstable diabetes mellitus.

Contraindications: Diabetes mellitus that can be regulated by diet alone; juvenile diabetes mellitus that is uncomplicated and well regulated on insulin; acute complications of diabetes mellitus (metabolic acidosis, coma, infection, gangrene); during or immediately after surgery where insulin is indispensable; severe hepatic disease; renal disease with uremia; cardiovascular collapse (shock); after disease states associated with hypoxemia.

Warnings: Use during pregnancy is to be avoided.

Precautions: 1. *Starvation Ketosis:* This must be differentiated from "insulin lack" ketosis and is characterized by ketonuria which, in spite of relatively normal blood and urine sugar, may result from excessive phenformin therapy, excessive insulin reduction, or insufficient carbohydrate intake. Adjust insulin dosage, lower phenformin dosage, or supply carbohydrates to alleviate this state. **Do not give insulin without first checking blood and urine sugar.**

2. *Lactic Acidosis:* This drug is not recommended in the presence of azotemia or in any clinical situation that predisposes to sustained hypotension that could lead to lactic acidosis. To differentiate lactic acidosis from ketoacidosis, periodic

determinations of ketones in the blood and urine should be made in diabetics previously stabilized on phenformin, or phenformin and insulin, who have become unstable. If electrolyte imbalance is suspected, periodic determinations should also be made of electrolytes, pH, and the lactate-pyruvate ratio. The drug should be withdrawn and insulin, when required, and other corrective measures instituted immediately upon the appearance of any metabolic acidosis.

3. *Hypoglycemia:* Although hypoglycemic reactions are rare when phenformin is used alone, every precaution should be observed during the dosage adjustment period particularly when insulin or a sulfonylurea has been given in combination with phenformin.

Adverse Reactions: Principally

gastrointestinal; unpleasant metallic taste, continuing to anorexia, nausea and, less frequently, vomiting and diarrhea. Reduce dosage at first sign of these symptoms. In case of vomiting, the drug should be immediately withdrawn. Although rare, urticaria has been reported, as have gastrointestinal symptoms such as anorexia, nausea and vomiting following excessive alcohol intake. (B) 98-146-103-D (6/72)

For complete details, including dosage, please see full prescribing information.

GEIGY Pharmaceuticals
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a new outlook in chronic pain

of moderate to severe intensity

Though Talwin® Tablets, brand of pentazocine (as hydrochloride), can be compared to codeine in analgesic efficacy, Talwin is not subject to narcotic controls. Patients receiving Talwin Tablets for prolonged periods face fewer of the consequences you've come to expect with meperidine or codeine. And that, in the long run, can mean a better outlook for your chronic-pain patient.

Talwin Tablets are:

- **Comparable to codeine in analgesic efficacy:** one 50 mg. Talwin Tablet appears equivalent in analgesic effect to 60 mg. (1 gr.) of codeine. Onset of significant analgesia usually occurs within 15 to 30 minutes. Analgesia is usually maintained for 3 hours or longer.
- **Tolerance not a problem:** tolerance to the analgesic effect of Talwin Tablets has not been reported, and no significant changes in clinical laboratory parameters attributable to the drug have been reported.
- **Dependence rarely a problem:** during three years of wide clinical use, only a few cases of dependence have been reported. In prescribing Talwin for chronic use, the physician should take precautions to avoid increases in dose by the patient and to prevent the use of the drug in anticipation of pain rather than for the relief of pain.
- **Not subject to narcotic controls:** convenient to prescribe — day or night — even by phone.
- **Generally well tolerated by most patients:** infrequently cause decrease in blood pressure or tachycardia; rarely cause respiratory depression or urinary retention; seldom cause diarrhea or constipation. If dizziness, light-headedness, nausea or vomiting are encountered, these effects tend to be self-limiting and to decrease after the first few doses. (See last page of this advertisement for a complete discussion of adverse reactions and a brief discussion of other Prescribing Information.)

50 mg. Tablets

Talwin®

brand of

pentazocine (as hydrochloride)

the long-range analgesic

a new outlook in chronic pain

of moderate to severe intensity



Contraindications: Talwin, brand of pentazocine (as hydrochloride), should not be administered to patients who are hypersensitive to it. **Warnings:** *Head Injury and Increased Intracranial Pressure.* The respiratory depressant effects of Talwin and its potential for elevating cerebrospinal fluid pressure may be markedly exaggerated in the presence of head injury, other intracranial lesions, or a pre-existing increase in intracranial pressure. Furthermore, Talwin can produce effects which may obscure the clinical course of patients with head injuries. In such patients, Talwin must be used with extreme caution and only if its use is deemed essential.

Usage in Pregnancy. Safe use of Talwin during pregnancy (other than labor) has not been established. Animal reproduction studies have not demonstrated teratogenic or embryotoxic effects. However, Talwin should be administered to pregnant patients (other than labor) only when, in the judgment of the physician, the potential benefits outweigh the possible hazards. Patients receiving Talwin during labor have experienced no adverse effects other than those that occur with commonly used analgesics. Talwin should be used with caution in women delivering premature infants.

Drug Dependence. There have been instances of psychological and physical dependence on parenteral Talwin in patients with a history of drug abuse and, rarely, in patients without such a history. Abrupt discontinuance following the extended use of parenteral Talwin has resulted in withdrawal symptoms. There have been a few reports of dependence and of withdrawal symptoms with orally administered Talwin. Patients with a history of drug dependence should be under close supervision while receiving Talwin orally.

In prescribing Talwin for chronic use, the physician should take precautions to avoid increases in dose by the patient and to prevent the use of the drug in anticipation of pain rather than for the relief of pain.

Acute CNS Manifestations. Patients receiving therapeutic doses of Talwin have experienced, in rare instances, hallucinations (usually visual), disorientation, and confusion which have cleared spontaneously within a period of hours. The mechanism of this reaction is not known. Such patients should be very closely observed and vital signs checked. If the drug is reinstituted it should be done with caution since the acute CNS manifestations may recur.

Usage in Children. Because clinical experience in children under 12 years of age is limited, administration of Talwin in this age group is not recommended.

Ambulatory Patients. Since sedation, dizziness, and occasional euphoria have been noted, ambulatory patients should be warned not to operate machinery, drive cars, or unnecessarily expose themselves to hazards.

Precautions: *Certain Respiratory Conditions.* Although respiratory depression has rarely been reported after oral administration of Talwin, the drug should be administered with caution to patients with respiratory depression from any cause, severe bronchial asthma and other obstructive respiratory conditions, or cyanosis.

Impaired Renal or Hepatic Function. Decreased metabolism of the drug by the liver in extensive liver disease may predispose to accentuation of side effects. Although laboratory tests have not indicated that Talwin causes or increases renal or hepatic impairment, the drug should be administered with caution to patients with such impairment.

Myocardial Infarction. As with all drugs, Talwin should be used with caution in patients with myocardial infarction who have nausea or vomiting.

Biliary Surgery. Until further experience is gained with the effects

of Talwin on the sphincter of Oddi, the drug should be used with caution in patients about to undergo surgery of the biliary tract. *Patients Receiving Narcotics.* Talwin is a mild narcotic antagonist. Some patients previously receiving narcotics have experienced no withdrawal symptoms after receiving Talwin.

CNS Effect. Caution should be used when Talwin is administered to patients prone to seizures; seizures have occurred in a few patients in association with the use of Talwin although no causal effect relationship has been established.

Adverse Reactions: Reactions reported after oral administration of Talwin include *gastrointestinal:* nausea, vomiting; infrequently constipation; and rarely abdominal distress, anorexia, diarrhea. *CNS effects:* dizziness, lightheadedness, sedation, euphoria, headache; infrequently weakness, disturbed dreams, insomnia, syncope, visual blurring and focusing difficulty, hallucinations (see *Acute CNS Manifestations* under WARNINGS); and rarely tremor, instability, excitement, tinnitus. *Autonomic:* sweating; infrequently flushing; and rarely chills. *Allergic:* infrequently rash; and rarely urticaria, edema of the face. *Cardiovascular:* infrequently decrease in blood pressure, tachycardia. *Other:* rarely respiratory depression, urinary retention.

Dosage and Administration: *Adults.* The usual initial adult dose is 1 tablet (50 mg.) every three or four hours. This may be increased to 2 tablets (100 mg.) when needed. Total daily dosage should not exceed 600 mg.

When antiinflammatory or antipyretic effects are desired in addition to analgesia, aspirin can be administered concomitantly with Talwin.

Children Under 12 Years of Age. Since clinical experience in children under 12 years of age is limited, administration of Talwin in this age group is not recommended.

Duration of Therapy. Patients with chronic pain who have received Talwin orally for prolonged periods have not experienced withdrawal symptoms even when administration was abruptly discontinued (see WARNINGS). No tolerance to the analgesic effect has been observed. Laboratory tests of blood and urine and of liver and kidney function have revealed no significant abnormalities after prolonged administration of Talwin.

Overdosage: Manifestations. Clinical experience with Talwin at overdosage has been insufficient to define the signs of this condition.

Treatment. Oxygen, intravenous fluids, vasopressors, and other supportive measures should be employed as indicated. Assisted controlled ventilation should also be considered. Although nalorphine and levallorphan are not effective antidotes for respiratory depression due to overdosage or unusual sensitivity to Talwin, parenteral naloxone (Narcan®, available through Endo Laboratories) is a specific and effective antagonist. If naloxone is not available, parenteral administration of the analeptic, methylphenidate (Ritalin) may be of value if respiratory depression occurs.

Talwin is not subject to narcotic controls.

How Supplied: Tablets, peach color, scored. Each tablet contains Talwin (brand of pentazocine) as hydrochloride equivalent to 50 mg. base. Bottles of 100.

Winthrop Winthrop Laboratories, New York, N. Y. 10016 (158)

50 mg. Tablets

Talwin
brand of
pentazocine (as hydrochloride)

the long-range analgesic

vacation in
a vial:
the spasm
reactors
in your practice
deserve



"the Donnatal[®] Effect"

	each tablet, capsule or 5 cc. teaspoonful of elixir (23% alcohol)	each Donnatal No. 2	each Extentab [®]
hyoscyamine sulfate	0.1037 mg.	0.1037 mg.	0.3111 mg.
atropine sulfate	0.0194 mg.	0.0194 mg.	0.0582 mg.
hyoscine hydrobromide	0.0065 mg.	0.0065 mg.	0.0195 mg.
phenobarbital	($\frac{1}{4}$ gr.) 16.2 mg.	($\frac{1}{2}$ gr.) 32.4 mg.	($\frac{3}{4}$ gr.) 48.6 mg.
(warning: may be habit forming)			

Brief summary. Side effects: Blurring of vision, dry mouth, difficult urination, and flushing or dryness of the skin may occur on higher dosage levels, rarely on usual dosage. Administer with caution to patients with incipient glaucoma or urinary bladder neck obstruction as in prostatic hypertrophy. Contraindicated in patients with acute glaucoma, advanced renal or hepatic disease or hypersensitivity to any of the ingredients.

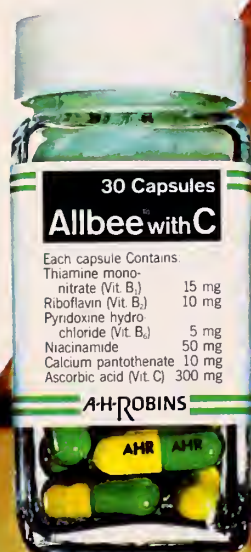
2 ways to provide a daily therapeutic supply of Vitamin C: 15 baked potatoes (skins and all!) or one capsule of Allbee® with C

About 20 mg. Vitamin C in one baked potato (2½" diameter).

To many people the evening meal just isn't complete without potatoes. But your patient would have to eat 15 of them (skins and all!) to get as much Vitamin C as is contained in just one Allbee with C capsule taken daily. A bottle of 30 (month's therapeutic dose) supplies as much ascorbic acid as 450 potatoes, plus full therapeutic amounts of the B-complex vitamins. For the patient who is counting calories, Allbee with C is small potatoes because the B's and C are water soluble. Consider the number of calories in 15 potatoes, not to mention the mountain of butter and sour cream. Allbee with C is available at pharmacies in the handy bottle of 30 and the economy size of 100 on your prescription or recommendation.

A. H. Robins Company,
Richmond, Va. 23220

AH-ROBINS



THYROID-FUNCTION TESTS ARE USEFUL IN MONITORING SYNTHROID® (sodium levothyroxine) THERAPY



- No calculations are needed, test interpretation is simple
- P.B.I., T₄ by Column, Murphy-Pattee, Free Thyroxine are all useful in monitoring patients on T₄ because they *all* measure T₄
- SYNTHROID patients are thereby easy to monitor because their test results will fall within predictable, elevated test ranges
- Of course, clinical assessment is the best criterion of the thyroid status of the drug-treated patient

TEST	HYPOTHYROID	SYNTHROID THERAPEUTIC NORMAL
P.B.I.	Less than 4 mcg %	6-10 mcg %
T ₄ By Column	Less than 3 mcg %	7-9 mcg %
T ₃ (Resin)	Less than 25%	27-35%
T ₃ (Red Cell)	Less than 11%	11.5-18%
Free Thyroxine	Less than 0.7 nanograms %	0.7-2.5 nanograms %
Murphy-Pattee	Less than 2.9 mcg %	4-11 mcg %

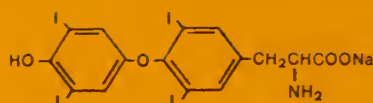
Synthroid®
(sodium levothyroxine)

*Choose
the Smooth
Road* ...to thyroid replacement therapy

Synthroid® (sodium levothyroxine)

brand of Sodium Levothyroxine, U.S.P. • Synthroid Tablets — for oral administration • Synthroid for Injection — for parenteral administration

SYNTHROID Tablets and SYNTHROID for Injection contain synthetic crystalline sodium levothyroxine. L-thyroxine is the metabolically active isomer secreted by the thyroid gland and is approximately twice as active as the racemic (DL-) form. For purposes of comparison, 0.1 mg. of SYNTHROID (sodium levothyroxine) elicits a clinical response approximately equal to that produced by one grain (65 mg.) of desiccated thyroid, U.S.P. SYNTHROID (sodium levothyroxine) simulates endogenous thyroxine in its gradual, sustained effect—an important consideration from the standpoint of maintenance—and in its high specificity for serum-thyroxine-binding protein. In contrast to desiccated thyroid and thyroglobulin, each dose of SYNTHROID (sodium levothyroxine) is uniform in hormone content, thus avoiding fluctuation in biologic potency and consequent treatment problems. SYNTHROID (sodium levothyroxine) permits maximal toleration because of its complete freedom from potentially allergenic protein substances.



Sodium Levothyroxine

Pharmacology: SYNTHROID (sodium levothyroxine) acts, as does endogenous thyroxine, to stimulate metabolism, growth, development and differentiation of tissues. It increases the rate of energy exchange, and increases the maturation rate of the epiphyses. Sodium levothyroxine is absorbed rapidly from the gastrointestinal tract after oral administration; following absorption, the compound becomes bound to the serum alpha globulin fraction. Accurate determination of either the PBI (protein-bound-iodine) or other appropriate tests may serve as a useful index of therapeutic response to SYNTHROID (sodium levothyroxine) therapy because of its affinity for serum proteins. The mean half-time of levothyroxine turnover is reported to be 6.5 days as measured by disappearance of radio-iodine (¹³¹I) labeled levothyroxine from the serum in euthyroid subjects.

Indications: SYNTHROID (sodium levothyroxine) is specific replacement therapy for diminished or absent thyroid function resulting from primary or secondary atrophy of the gland, congenital defect, surgery, excessive radiation, or anti-thyroid drugs. Indications for SYNTHROID (sodium levothyroxine) Tablets include myxedema, hypothyroidism without myxedema, hypothyroidism in pregnancy, pediatric and geriatric hypothyroidism, hypopituitary hypothyroidism, simple (non-toxic) goiter, and reproductive disorders associated with hypothyroidism. SYNTHROID (sodium levothyroxine) for Injection is indicated for intravenous use in myxedematous coma and other thyroid dysfunctions where rapid replacement of the hormone is required. The injection is also indicated for intramuscular use in cases where the oral route is suspect or contraindicated due to existing conditions or to absorption defects, and when a rapid onset of effect is not desired.

Precautions: As with other thyroid preparations, an overdose of SYNTHROID (sodium levothyroxine) may cause diarrhea or cramps, nervousness, tremors, tachycardia, vomiting, and continued weight loss. While these effects may begin after four to five days, they may not become apparent for one to three weeks. Patients receiving the drug should therefore be kept under close observation for signs of thyrotoxicosis. If indications of overdose appear, the medication should be discontinued for two to six days and then resumed at a lower level. Signs of optimal thyroid function will establish the proper maintenance dose.

The severity of diabetes may be reduced by hypothyroidism, and the requirement for insulin is often lowered. Therefore, patients with diabetes mellitus should be observed closely for possible changes in insulin or other antidiabetic drug dosage requirements.

If hypothyroidism is accompanied by adrenal insufficiency, such as Addison's disease (chronic adrenocortical insufficiency), Simmond's disease (panhypopituitarism), or Cushing's syndrome (hyperadrenism), these dysfunctions must be corrected prior to and during SYNTHROID (sodium levothyroxine) administration. The patient's progress during thyroid treatment must be observed carefully and regularly for evidence of the development of any of these conditions.

Caution must be exercised in the administration of this drug to patients with cardiovascular disease; development of chest pains or other aggravation of the cardiovascular disease requires a reduction of dosage.

Contraindications: SYNTHROID (sodium levothyroxine) therapy is contraindicated in thyrotoxicosis and acute myocardial infarction.

Side effects: The effects of SYNTHROID (sodium levothyroxine) therapy are slow in being manifested. Side effects, when they do occur, are secondary to increased rates of body metabolism: sweating, heart palpitations with or without pain, leg cramps, and weight loss. Diarrhea, vomiting, and nervousness have also been observed. Myxedematous patients with heart disease have died from abrupt increases in dosage of thyroid drugs. Careful observation of the patient during the beginning of any thyroid therapy will alert the physician to any untoward effects.

In most cases with side effects, a reduction in dosage followed by a more gradual adjustment will result in a more accurate indication of the patient's dosage requirements without the appearance of side effects.

Dosage and administration: The importance of careful diagnosis of hypothyroidism must always be considered, despite the fact that symptomatically the condition is one of the most clear-cut of endocrine disorders. Diagnosis should include laboratory testing of basal metabolic rate, serum PBI, and other tests for thyroid function to support clinical signs of thyroid hypofunction.

Treatment of hypothyroidism requires replacement of thyroid hormone in daily amounts adequate for maintaining normal metabolism. Reliable laboratory measurements and good clinical judgment will determine the daily dose required to achieve the goal of therapy. The correct concentration of thyroxine is essential for the health of all tissues; overdose may lead to thyrotoxicosis medicamentosa, while underdosage permits the continuation of the hormonal deficiency.

Treatment can be guided by the serum PBI level (the normal range in males is 4.5 to 7.5 mcg%; in females, 5.5 to 8.5 mcg%) produced after a few weeks by the daily dose of thyroxine administered. A PBI level below 5 mcg% may indicate the need for a larger dose of thyroxine. PBI levels are not absolute indicators of the thyroid state, however. In patients made euthyroid with SYNTHROID (sodium levothyroxine), it is not unusual to find PBI levels of 8 to 10 mcg%. Levothyroxine has a high binding capacity for serum proteins in contrast to other thyroid medicaments which may contain varying amounts of L-triiodothyronine which has a low binding capacity.

In adult myxedema (when the PBI is often as low as 2.5 mcg% or less), the starting dose of SYNTHROID (sodium levothyroxine) should be 0.025 mg. daily, increased to 0.05 mg. after two weeks and to 0.1 mg. at the end of a second two weeks. A serum PBI, ECG, and clinical examination should be made after 30 days on this dosage regimen. In the event of an over-all rapid recovery, the 0.1 mg. daily dose should be continued, and the clinical status reviewed after an additional 30 days (total treatment period of approximately 90 days). The daily dose may then be increased to 0.2 mg. After an additional two months on this regimen, clinical and PBI evaluations should be repeated. If either appears to be below normal, the daily dose should be increased to 0.3 mg. Permanent maintenance doses vary with the individual patient, ranging from 0.1 to 1.0 mg. daily.

The same starting dose of SYNTHROID (sodium levothyroxine) as administered for adult myxedema may be employed for cretinism or severe hypothyroidism in children, but all intervals of change should be made every two weeks. In the growing child, final dosage requirements may be greater than in the adult. In cases where cretinism is discovered after the first six weeks of life, overdosage of SYNTHROID (sodium levothyroxine) therapy is much preferred to under-treatment, in order to accelerate growth rate. As with the adult patient, serum PBI may be measured during SYNTHROID (sodium levothyroxine) administration.

In hypothyroidism without myxedema (where the PBI usually ranges from 2.5 to 4.5 mcg%), the starting dose of SYNTHROID (sodium levothyroxine) may be 0.1 mg. daily and may be increased by 0.1 mg. every 30 days. Clinical evaluation should be made monthly and PBI measurements about every 90 days. Final maintenance dosage will usually range from 0.2 to 0.4 mg. daily, although higher maintenance dosages are sometimes necessary.

In myxedematous stupor or coma, with no evidence of severe heart disease, 200 to 400 mcg of SYNTHROID (sodium levothyroxine) for Injection may be administered intravenously utilizing a solution containing 100 mcg per ml. Detectable effects are usually observed by the sixth hour after injection and are fully appreciated during the following day. A repeat injection of 100 to 200 mcg may be given on the second day if significant improvement has not occurred. The intravenous use of sodium levothyroxine in myxedematous coma is advantageous because it produces a predictable increase in the concentration of protein-bound iodine, eliminates the need for multiple doses until oral therapy is reinstated, circumvents the uncertainty of oral or intramuscular absorption, and avoids the risk of pulmonary aspiration. SYNTHROID (sodium levothyroxine) for Injection is given by the intramuscular route when the oral route is impractical and a rapid onset of effect is not desired.

It should be noted that in some patients whose PBI is 4.0 mcg% or less, endogenous secretion is reduced when exogenous thyroid hormone is administered. In these patients, the PBI does not increase as would be expected after a few weeks of medication. This may indicate the need for a longer period of observation to ascertain the required dosage. In such patients, several months may be needed to determine the correct maintenance dosage.

How supplied: SYNTHROID (sodium levothyroxine) Tablets are supplied as scored, color-coded compressed tablets in seven concentrations: 0.025 mg. (orange), 0.05 mg. (white), 0.1 mg. (yellow), 0.15 mg. (violet), 0.2 mg. (pink), 0.3 mg. (green), and 0.5 mg. (blue).

SYNTHROID (sodium levothyroxine) for Injection is supplied in 10 ml vials containing 500 mcg of lyophilized active ingredient and 10 mg of Mannitol, N.F. a 5 ml vial containing Sodium Chloride Injection, U.S.P., is provided as diluent.

Directions for reconstitution: Reconstitute the lyophilized sodium levothyroxine by aseptically adding 5 ml. of the Sodium Chloride Injection, U.S.P., to the vial. Shake vial to insure complete mixing.

Use immediately after reconstitution. Discard any unused portion.

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Change the AMA!

Maybe you're one of those doctors at odds with some AMA policies. Your question is: how do you change them?

First, consider who sets those policies. In a real sense, it is you. You elect the delegates to your state association. They in turn elect the delegates who will represent your views in the AMA House.

As an active, involved member, you can influence policy by making your views known to your delegates, both national and state. It is your democratic right — and responsibility.

Write your delegates, call them, see them. If they aren't responsive, tell them they'll be hearing from you at election time.

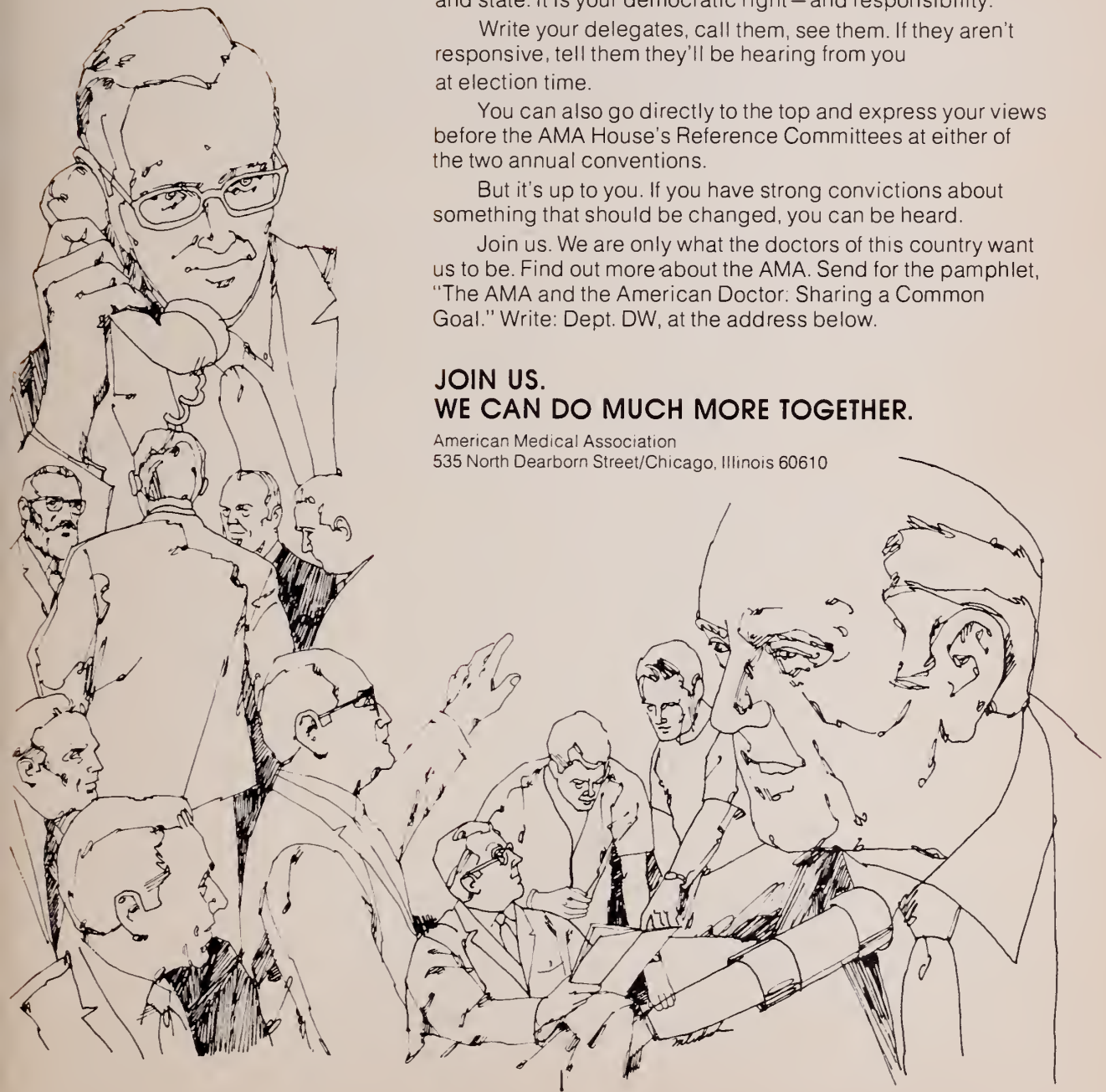
You can also go directly to the top and express your views before the AMA House's Reference Committees at either of the two annual conventions.

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When you select this familiar antibiotic for IV infusion you have available a broad dosage range that hospitalized patients may need.

Intravenous Lincocin (lincomycin hydrochloride, Upjohn), with its 1.2 to 8 grams/day dosage range, covers many serious and even life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. Lincocin IV therefore can be as useful in your hospitalized patients as its IM use has proved to be in your office patients. As with all antibiotics, *in vitro* susceptibility studies should be performed.

1.2 to 8 grams/day IV dosage range:

Most hospitalized patients with uncomplicated pneumonias respond satisfactorily to 1.2 to 1.8 grams/day of Lincocin IV. These doses may have to be increased for more serious infections.

In life-threatening situations as much as 8 grams/day has been administered intravenously to adults.

In usual IV doses, Lincocin (lincomycin hydrochloride, Upjohn) should be diluted in 250 ml or more of normal saline solution or 5% glucose in water. But when 4 grams or more per day is given, Lincocin should be diluted in not less than 500 ml of either solution, and the rate of administration should not exceed 100 ml/hour. Too rapid intravenous administration of doses exceeding 4 grams may result in hypotension or, in rare instances, cardiopulmonary arrest.

Effective gram-positive antibiotic:

Lincocin IV is effective in respiratory tract, skin and soft-tissue, and bone



infections caused by susceptible strains of pneumococci, streptococci, and staphylococci, including penicillin-resistant strains. Staphylococcal strains resistant to Lincocin (lincomycin hydrochloride, Upjohn) have been recovered. Before initiating therapy, culture and susceptibility studies should be performed. Lincocin has proved valuable in treating patients hypersensitive to penicillin or cephalosporins, since Lincocin does not share antigenicity with these compounds. However, hypersensitivity reactions have been reported, some of these in patients known to be sensitive to penicillin.

Well tolerated at infusion site: Lincocin intravenous infusions have not produced local irritation or phlebitis, when given as recommended. Lincocin is usually well tolerated in patients who are hypersensitive to other drugs. Nevertheless, Lincocin should be used cautiously in patients with asthma or significant allergies.

In patients with impaired renal function, the recommended dose of Lincocin should be reduced to 25–30% of the dose for patients with normal kidney function. Its safety in pregnant patients and in infants less than one month of age has not been established.

Lincocin may be used with other antimicrobial agents: Since Lincocin is stable over a wide pH range, it is suitable for incorporation in intravenous infusions; it also may be

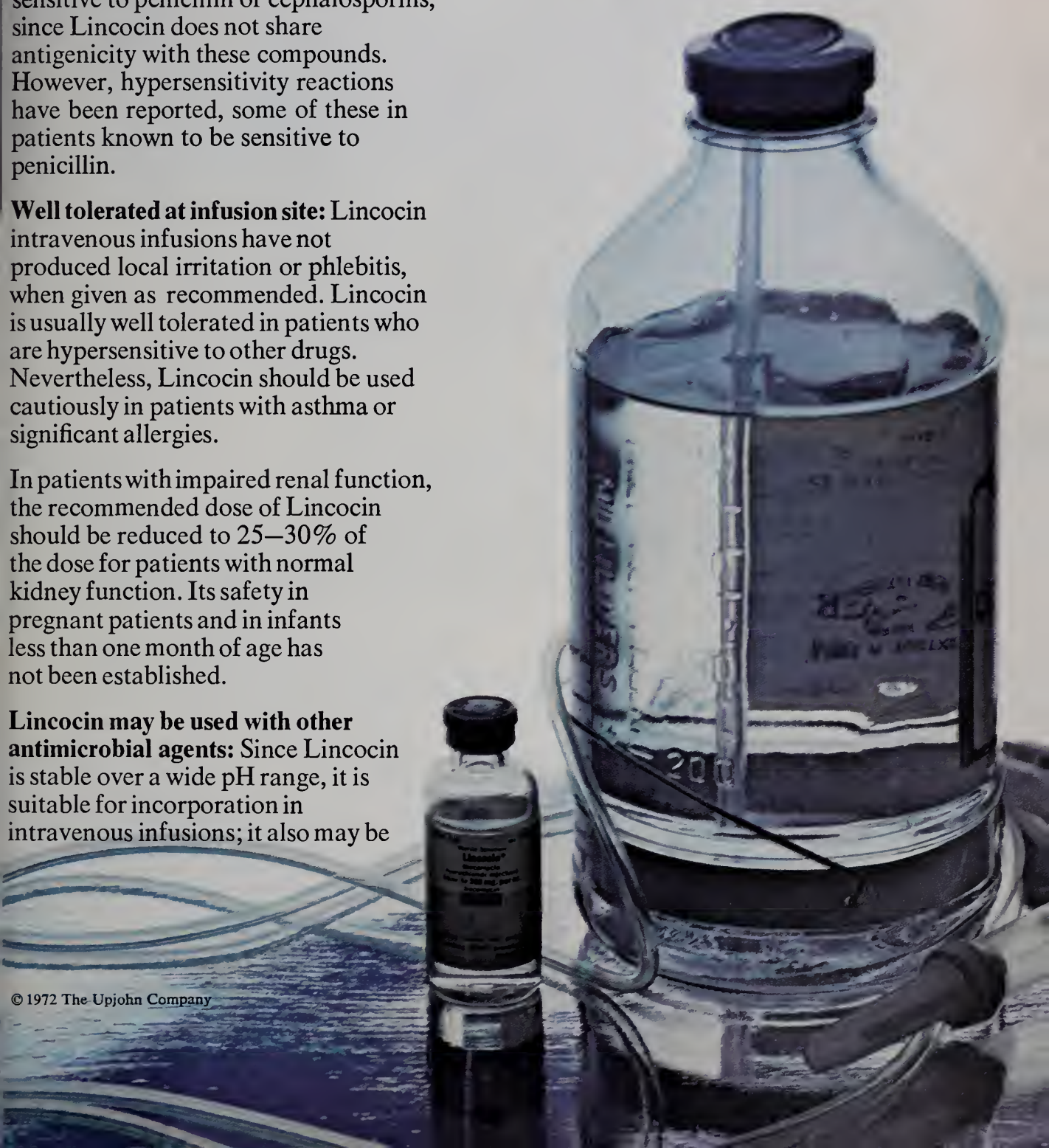
administered concomitantly with other antimicrobial agents when indicated. However, Lincocin should not be used with erythromycin, as *in vitro* antagonism has been reported.

Lincocin[®]

Sterile Solution (300 mg per ml)

(lincomycin hydrochloride, Upjohn)

For further prescribing information, please see following page.





Sterile Solution (300 mg. per ml.)

Lincocin[®]

(lincomycin hydrochloride, Upjohn)

Up to 8 grams per day by IV infusion for hospitalized patients with life-threatening infections.

Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. As with all antibiotics, *in vitro* susceptibility studies should be performed.

Each preparation contains:

Lincomycin hydrochloride monohydrate equivalent to lincomycin base

250 mg Pediatric Capsule 250 mg
500 mg Capsule 500 mg
*Sterile Solution per 1 ml 300 mg
Syrup per 5 ml 250 mg

*Contains also: Benzyl Alcohol 9 mg; and, Water for Injection—q.s.

Lincocin (lincomycin hydrochloride) is indicated in infections due to susceptible strains of staphylococci, pneumococci, and streptococci. *In vitro* susceptibility studies should be performed. Cross resistance has not been demonstrated with penicillin, ampicillin, cephalosporins, chloramphenicol or the tetracyclines. Some cross resistance with erythromycin has been reported. Studies indicate that Lincocin does not share antigenicity with penicillin compounds.

CONTRAINDICATIONS: History of prior hypersensitivity to lincomycin or clindamycin. Not indicated in the treatment of viral or minor bacterial infections.

WARNINGS: CASES OF SEVERE AND PERSISTENT DIARRHEA HAVE BEEN REPORTED AND HAVE AT TIMES NECESSITATED DISCONTINUANCE OF THE DRUG. THIS DIARRHEA HAS BEEN OCCASIONALLY ASSOCIATED WITH BLOOD AND MUCUS IN THE STOOLS AND HAS AT TIMES RESULTED IN AN ACUTE COLITIS. THIS SIDE EFFECT USUALLY HAS BEEN ASSOCIATED WITH THE ORAL DOSAGE FORM BUT OCCASIONALLY HAS

BEEN REPORTED FOLLOWING PARENTERAL THERAPY. A careful inquiry should be made concerning previous sensitivities to drugs or other allergens. Safety for use in pregnancy has not been established and Lincocin (lincomycin hydrochloride) is not indicated in the newborn. Reduce dose 25 to 30% in patients with severe impairment of renal function.

PRECAUTIONS: Like any drug, Lincocin should be used with caution in patients having a history of asthma or significant allergies. Overgrowth of nonsusceptible organisms, particularly yeasts, may occur and require appropriate measures. Patients with pre-existing monilial infections requiring Lincocin therapy should be given concomitant antimicrobial treatment. During prolonged Lincocin therapy, periodic liver function studies and blood counts should be performed. Not recommended (inadequate data) in patients with pre-existing liver disease unless special clinical circumstances indicate. Continue treatment of β -hemolytic streptococci infections for 10 days to diminish likelihood of rheumatic fever or glomerulonephritis.

ADVERSE REACTIONS: *Gastrointestinal*—Glossitis, stomatitis, nausea, vomiting. Persistent diarrhea, enterocolitis, and pruritus ani. *Hemopoietic*—Neutropenia, leukopenia, agranulocytosis, and thrombocytopenic purpura have been reported. *Hypersensitivity reactions*—Hypersensitivity reactions such as angioneurotic edema, serum sickness, and anaphylaxis have been reported, sometimes in patients sensitive to penicillin. If allergic reaction occurs, discontinue drug. Have epinephrine, corticosteroids, and antihista-

mines available for emergency treatment. *Skin and mucous membranes*—Skin rashes, urticaria, vaginitis, and rare instances of exfoliative and vesiculobullous dermatitis have been reported. *Liver*—Although no direct relationship to liver dysfunction is established, jaundice and abnormal liver function tests (particularly serum transaminase) have been observed in a few instances. *Cardiovascular*—Instances of hypotension following parenteral administration have been reported, particularly after too rapid IV administration. Rare instances of cardiopulmonary arrest have been reported after too rapid IV administration. If 4.0 grams or more administered IV, dilute in 500 ml of fluid and administer no faster than 100 ml per hour. *Special senses*—Tinnitus and vertigo have been reported occasionally. *Local reactions*—Excellent local tolerance demonstrated to intramuscularly administered Lincocin (lincomycin hydrochloride). Reports of pain following injection have been infrequent. Intravenous administration of Lincocin in 250 to 500 ml of 5% glucose in distilled water or normal saline has produced no local irritation or phlebitis.

HOW SUPPLIED: 250 mg and 500 mg Capsules—bottles of 24 and 100. *Sterile Solution*, 300 mg per ml—2 and 10 ml vials and 2 ml syringe. *Syrup*, 250 mg per 5 ml—60 ml and pint bottles.

For additional product information, consult the package insert or see your Upjohn representative.

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The science of treating gas pain

1. When gas is *entrapped* in the G.I. tract, it can cause pain severe enough to mimic that of peptic ulcer, angina pectoris, or myocardial infarction.^{1,2} **2.** Most of the gas symptoms brought to your attention will be due to gas trapped in the intestines, not the stomach. **3.** The source of most G.I. gas is air-swallowing, often an anxiety response of which the patient is unaware.

^{new} PHASIL[®] treats gas pain scientifically

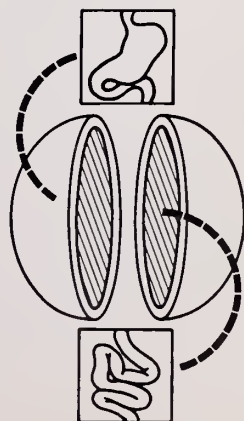
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Sig.: One Phasil tablet before meals and at bedtime provides reliable relief of gas pain, bloating and distention. Available in bottles of 100 tablets.

References: 1. Roth, J. L.: *Ann. N.Y. Acad. Sci.* 150:109, Feb. 26, 1968. 2. Reich, N. E., and Fremont, R. E. (eds.): *Chest Pain*, The Macmillan Company, New York, 1961, p. 348.



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provides more complete relief:

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- ☐ simethicone—for accompanying distention and pain due to gas
- ☐ phenobarbital—for associated anxiety and tension

Contraindications: Hypersensitivity to barbiturates or belladonna alkaloids, glaucoma, advanced renal or hepatic disease.

Precautions: Administer with caution to patients with incipient glaucoma, bladder neck obstruction or urinary bladder atony. Prolonged use of barbiturates may be habit-forming.

Side effects: Blurred vision, dry mouth, dysuria, and other

atropine-like side effects may occur at high doses, but are only rarely noted at recommended dosages.

Dosage: *Adults:* One or two tablets three or four times daily. Dosage can be adjusted depending on diagnosis and severity of symptoms.

Children 2 to 12 years: One-half or one tablet three or four times daily. Tablets may be chewed or swallowed with liquids.



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(from the Greek *kinetikos*,
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and the Latin *sedatus*,
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Each *chewable tablet* contains: 16 mg. phenobarbital (warning: may be habit-forming); 0.1 mg. hyoscyamine sulfate; 0.02 mg. atropine sulfate; 0.007 mg. scopolamine hydrobromide; 40 mg. simethicone.

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This southwestern desert lizard seeks
shelter in crevices of rocks.
When attempts are made to probe him
from his niche, he gulps air
until his torso is distended up to
sixty per cent over its normal size...
thus wedging himself tightly
in place and preventing capture.



"Take me to your Leader" should read "Follow your Leader" for Eleanor sets an example of service coupled with enduring friendships. Not only does Eleanor actively support and work in all phases of the auxiliary she also

finds adequate time to devote to her family, community, and many time consuming hobbies.

Since arriving in Oklahoma in 1946 both Eleanor and Port have devoted most of their

time to health related activities. Eleanor has served her local auxiliary in every office. She works in the Hospital Auxiliary and National Hospital Association. She was instrumental in organizing the Oklahoma Council for Health Careers. She co-chaired the local Comprehensive Health Planning Council.

When not working to promote better health practices, the Johnsons fly their own plane to see their three children with Eleanor acting as navigator. And they have found time to teach all their grandchildren to swim in their own pool. Eleanor's agile hands keep pace with her busy mind. She excels in many handcrafts from sewing to mosaics.

Are you breathless? Our president for 1972-73 certainly sets a path of service which each physician's wife should emulate—service health oriented for the betterment of others. *CSL* □

Dear Doctors' Wives,

Thank you for the privilege of attending the AMA-Auxiliary Health Education Conference held in Chicago recently.

Health education as the key to improving the quality of life for everyone was stressed. We, The Medical Family, must play the major role by starting cooperative action programs in our communities.

Health Education must begin in the lower schools. Community support must be recruited first. Parents need to be involved but the students need to be directed into acquiring positive attitudes toward maintaining their own health programs. We must close the gap between knowledge and behavior in health habits.

Education for retirement looms large as a major health involvement for all auxiliaries. Giving the aged something besides "waiting for death" demands our special attention.

Strong community action is needed if we are to seek the positive state of a healthy mind in a healthy body in a healthy environment. Make these suggestions one of the priorities of your lives. Health education can achieve for each his basic inalienable right: "A Life of Quality."

*Sincerely,
Eleanor
(Mrs. Port Johnson), State President*

Acupuncture is being taken more seriously. The National Institute of Health has announced it will conduct a major study of the ancient Chinese medical practice of curing illness and relieving pain by piercing the skin with needles. Initial study will concentrate on the methods used for surgical anesthesia and for the alleviation of certain chronic pain syndromes.

Chiropractors discovered acupuncture early. Seminars are being conducted across the country and a Kansas City, Missouri chiropractor has founded the Acupuncture Society of America. One recent three-day seminar featured a registration fee of \$250. Since most state laws do not permit chiropractors to puncture the skin or tissue, the Acupuncture Society of America advertises that its seminars will "present the essence" of acupuncture "with or without the use of needles (to conform to your state law)." One chiropractor said "hundreds of (chiropractors) are using finger pressure acupuncture as a part of their treatment routine . . .".

Oklahoma's V.D. Control Project, funded through the State Health Department, began operation July 1st. The program plans include a statewide screening of patients for gonorrhea and syphilis through existing family planning clinics and in free VD clinics which will be established in high incidence areas. Another portion of the program includes a public awareness campaign and health education program.

While Health Maintenance Organization (HMO) legislation is nearing the finish line in Congress, one of the nation's pioneer pre-paid group practices, the Health Insurance Plan of Greater New York, known as HIP, is in the midst of financial difficulties. HIP recently won a 29 percent rate increase on its members from the New York Insurance Commission. In 1969 it went up 37 percent. Proponents of HMOs don't feel that HIP is typical of the HMO concept, but admit that its troubles are bound to reflect on current legislation.

Physicians still receive top honors in social status according to a survey from the University of Missouri. Twenty-five occupations were evaluated and physicians were at the top. In another study a public survey conducted by the University of Connecticut showed that physicians ranked highest in truthfulness, competence, and public trust. They rated second only to clergymen and

altruism. Other rankings in the public trust category put newspaper columnists at 16th followed by labor union officials, politicians, and used car salesmen.

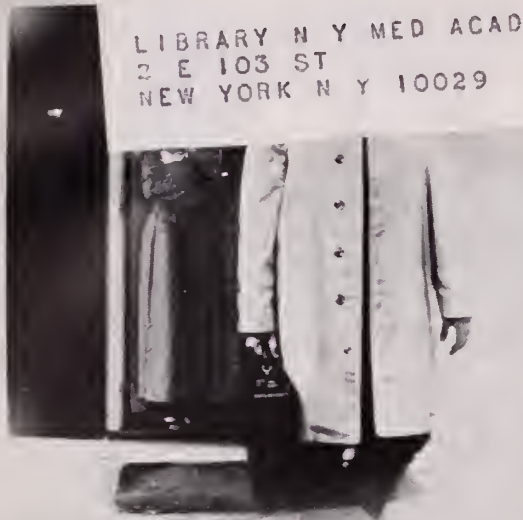
A strong push for national health insurance, of some kind, is expected now that Senator Kennedy can concentrate on his personal campaign to become closely identified with the health care issue. Meanwhile, Kennedy in his new found ally, Representative Wilbur Mills, are on the brink of coming out with a new Kennedy-Mills National Health Insurance Bill. Considerable staff work has already gone into the proposed draft. With George McGovern deeply indebted to Kennedy for the support the Senator gave to the nominee at the convention, it is expected that McGovern will make a lot of noise about national health insurance during his campaign.

In 1971 the Oklahoma State Department of Health paid nearly \$200,000 to private MDs for consultation and clinic services. Health Commissioner Leroy Carpenter, MD, said, "Without the services of these physicians, we would simply not have been able to offer the level of health services so necessary to the citizens of this state."

National Health Insurance will be the topic for the 1972-73 intercollegiate debate year. The question is, "Resolved: That the federal government should provide a program of comprehensive medical care for all U. S. citizens." As a special service to collegiate debaters the AMA is developing a kit that will provide basic information on current national health insurance proposals.

Oklahoma and Arkansas members of the American College of Physicians and Societies of Internal Medicine have planned a two-day scientific session October 6th and 7th at Shangri La Lodge, located on Monkey Island near Grove, Oklahoma. A regional meeting, the two-day session is one of 45 scientific meetings sponsored by the ACP during the 1972-73 academic year. Physicians interested in attending should contact David Bickham with the OSMA office in Oklahoma City. □

Will his return to work mean the return of undue psychic tension?



When it's mandatory to keep the post-roratory patient calm, consider Valium (diazepam).

Although he's promised to take it easy back on the job, you know he's going back to the same stressful circumstances that may have contributed to his hospitalization. If he experiences excessive anxiety and tension because of overreaction to stress, your prescription for Valium can bring relief. During the period of readjustment Valium can quiet undue anxiety.

For moderate states of psychic tension, 5-mg or 2-mg Valium tablets *b.i.d.* to *q.i.d.* can usually provide reliable relief. For severe tension/anxiety

states, the 10-mg tablets often produce desired results.

The most commonly reported side effects are drowsiness, ataxia and fatigue. Until individual response is determined, caution patient against driving or operating dangerous machinery.

SEP 29 1972

NEW YORK ACADEMY

OF PSYCHIATRY

Valium® (diazepam)

For the tense cardiac patient who must be kept calm

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures.

Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of child bearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision.

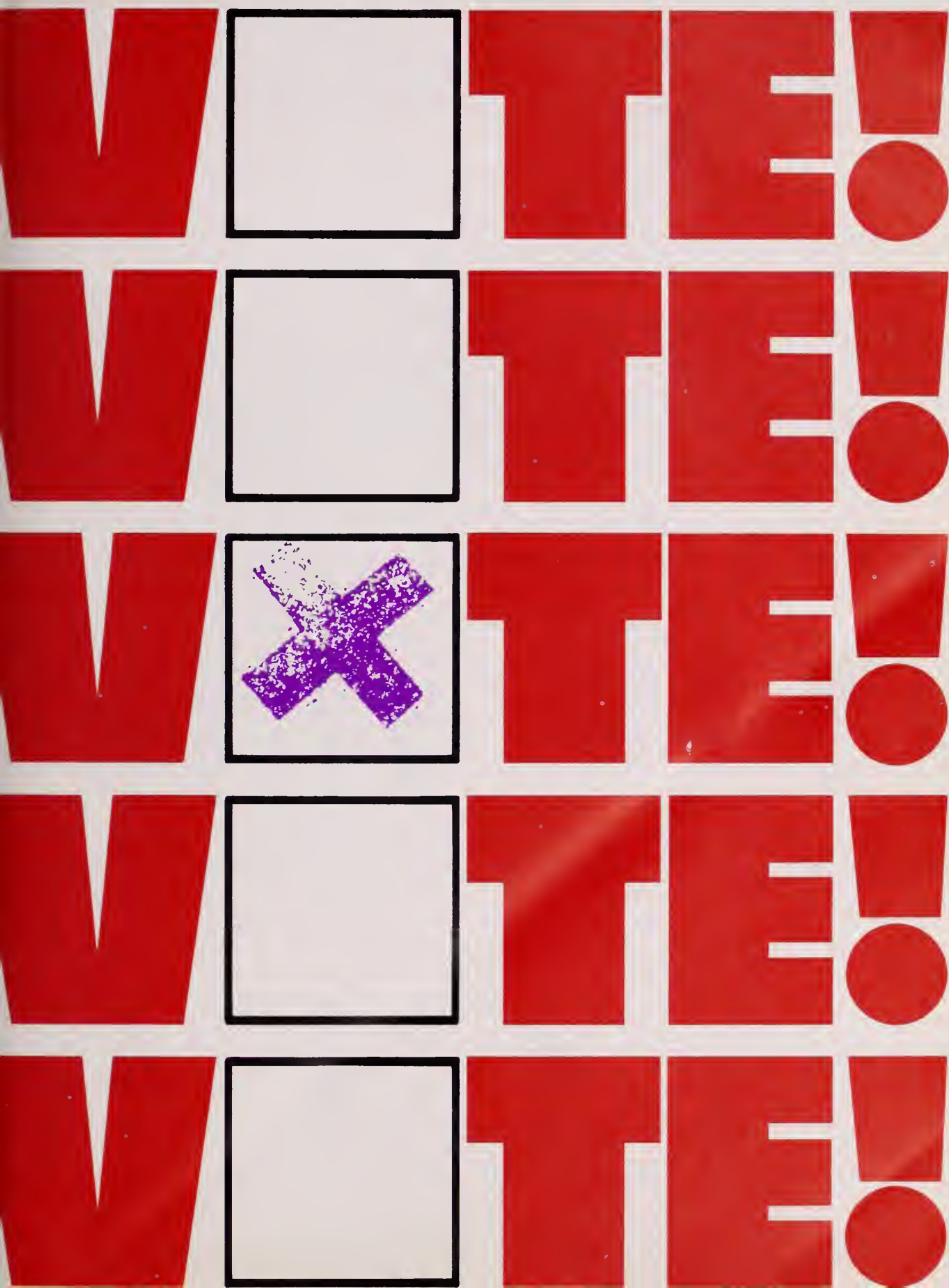
Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

Dosage: Individualize for maximum beneficial effect. **Adults:** Tension, anxiety and psychoneurotic states, 2 to 10 mg *b.i.d.* to *q.i.d.*; alcoholism, 10 mg *t.i.d.* or *q.i.d.* in first 24 hours, then 5 mg *t.i.d.* or *q.i.d.* as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg *t.i.d.* or *q.i.d.*; adjunctively in convulsive disorders, 2 to 10 mg *b.i.d.* to *q.i.d.* **Geriatric or debilitated patients:** 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) **Children:** 1 to 2½ mg *t.i.d.* or *q.i.d.* initially, increasing as needed and tolerated (not for use under 6 months).

Supplied: Valium® (diazepam) Tablets, 2 mg, 5 mg and 10 mg; bottles of 100 and 500. All strengths also available in Tel-E-Dose® packages of 1000.

ROCHE

Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, N.J. 07110





Everybody experiences psychic tension.



Most people can handle this tension.



Some people develop excessive psychic tension and need your counseling,



and a few may need counseling
and the psychotropic action of Valium® (diazepam).

Before deciding to make Valium (diazepam) part of your treatment plan, check on whether or not the patient is presently taking drugs and, if so, what his response has been. Along with the medical and social history, this information can help you determine initial dosage, the possibility of side effects and the ultimate prospects of success or failure.

While Valium can be a most helpful adjunct to your counseling, it should be prescribed only as long as excessive psychic tension persists and should be discontinued when you decide it has accomplished its therapeutic task. In general, when dosage guidelines are followed, Valium is well tolerated (see Dosage). For convenience it is available in 2-mg, 5-mg and 10-mg tablets.

Drowsiness, fatigue and ataxia have been the most commonly reported side effects.

Until response is determined, patients receiving Valium should be cautioned against engaging in hazardous occupations requiring complete mental alertness, such as driving or operating machinery.



Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, N.J. 07110

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

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Supplied: Valium® (diazepam) Tablets, 2 mg, 5 mg and 10 mg; bottles of 100 and 500. All strengths also available in Tel-E-Dose® packages of 1000.

Valium® (diazepam)

To help you manage excessive psychic tension

What Oklahoma doctors need, is a Malpractice Liability Carrier that won't fade when trouble comes.



This means the up-to-date carrier. The one that's replete with innovations and new developments in this clouded, sensitive area of liability protection. And the one that doesn't talk malpractice coverage just to get a foot in the door for every other kind of insurance.

What Oklahoma doctors need, is Casualty Indemnity Exchange, the carrier that pioneered the modern approach to malpractice coverage, and the carrier geared to STAY in the market.

Contact your local agent, or
L. E. Stoner, Jr.
4501 East 31st Street • Tulsa, Okla. 74135
(918) 747-8631 or



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Pinworm therapy is often a family affair



Contraindications: History of hypersensitivity to thiabendazole.

Warnings: If hypersensitivity reactions occur, drug should be discontinued immediately and not resumed. Rarely, erythema multiforme has been associated with thiabendazole therapy; in severe cases (Stevens-Johnson syndrome), fatalities have occurred. Because CNS side effects may occur quite frequently, activities requiring mental alertness should be avoided. Safe use in pregnancy or lactation has not been established.

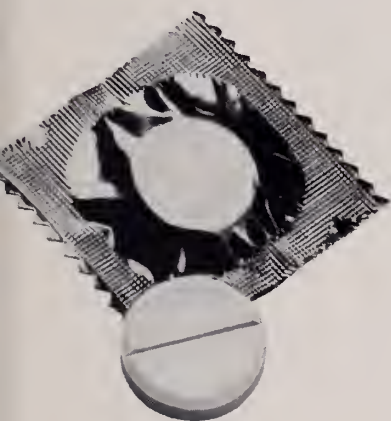
Precautions: Ideally, supportive therapy is indicated for anemic, dehydrated, or malnourished patients prior to initiation of anthelmintic therapy. In presence of hepatic or renal dysfunction,

patients should be carefully monitored.

Adverse Reactions: Most frequently encountered are anorexia, nausea, vomiting, and dizziness. Less frequently, diarrhea, epigastric distress, pruritus, weariness, drowsiness, giddiness, and headache have occurred. Rarely, tinnitus, hyperirritability, numbness, abnormal sensation in eyes, blurring of vision, xanthopsia; hypotension, collapse; enuresis; transient rise in cephalin flocculation and SGOT; perianal rash, cholestasis and parenchymal liver damage; hyperglycemia; transient leukopenia; malodor of the urine, crystalluria, hematuria; appearance of live *Ascaris* in the mouth and nose. Hypersensitivity reactions

A New Dosage Form:

Chewable Tablets 500 mg Mintezol® (THIABENDAZOLE | MSD)



so easy to take
everyone in the family
can keep to the
regimen you prescribe

include: fever, facial flush, chills, conjunctival injection, angioedema, anaphylaxis, skin rashes, erythema multiforme (including Stevens-Johnson syndrome), and lymphadenopathy. **Supplied:** Chewable tablets, containing 500 mg thiabendazole, in boxes of 36, strip packaged, individually foil wrapped; Suspension, containing 500 mg thiabendazole per 5 cc, in bottles of 120 cc.

For more detailed information, consult your MSD representative or see full prescribing information. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486

MSD
MERCK
SHARP
&
DOHME
addendum

INDICATION | DOSAGE SCHEDULE

MINTEZOL® (Thiabendazole, MSD) has demonstrated effectiveness against a broad spectrum of nematode infections. Dosages are weight related. For your convenience, the information in the weight-dose chart below is included in the full prescribing information and in the 1973 edition of PDR.

The recommended maximum daily dose of MINTEZOL is 3 g (6 tablets).

MINTEZOL should be given after meals if possible. Dietary restriction, complementary medications, and cleansing enemas are not needed.

The usual dosage schedule for all conditions is two doses per day. The size of the dose is determined by the patient's weight.

Weight-dose chart:

WEIGHT (lb)	EACH DOSE (g)	TABLETS
25	0.25	½
50	0.5	1
75	0.75	1½
100	1.0	2
125	1.25	2½
150 & over	1.5	3

The regimen for each indication follows:

INDICATION	REGIMEN	COMMENTS
Pinworm disease	Two doses per day for 1 day. Repeat in 7 days. This regimen is designed to reduce the risk of reinfection.	If this is not practical, give 2 doses per day for 2 successive days.
Threadworm,* large roundworm,* hookworm,* and whipworm* disease	Two doses per day for 2 successive days.	A single dose of 20 mg/lb or 50 mg/kg may be employed as an alternative schedule, but a higher incidence of side effects should be expected.
Creeping eruption	Two doses per day for 2 successive days.	If active lesions are still present 2 days after completion of therapy, a second course is recommended.
Symptoms of trichinosis* during the invasive phase of the disease	Two doses per day for 2 to 4 successive days according to the response of the patient.	The optimal dosage for the treatment of trichinosis has not been established.

*Clinical experience with thiabendazole for treatment of each of these conditions in children weighing less than 30 lb has been limited.



Round and round she goes
and where she stops...

Antivert[®] (meclizine HCl) for vertigo*

- Indicated in the management of nausea, vomiting and dizziness associated with motion sickness.
- Found useful in the management of vertigo associated with diseases affecting the vestibular system.
- Available as Antivert[®] (12.5 mg. meclizine HCl) blue and white scored tablets and also as Antivert[®]/25 (25 mg. meclizine HCl) yellow and white scored tablets.

*INDICATIONS. Based on a review of this drug by the National Academy of Sciences-National Research Council and/or other information, FDA has classified the indications as follows:

Effective: Management of nausea and vomiting and dizziness associated with motion sickness.

Possibly Effective: Management of vertigo associated with diseases affecting the vestibular system.

Final classification of the less than effective indications requires further investigation.

CONTRAINDICATIONS. Administration of Antivert during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12th-15th day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Usage in Children: Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy: See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

ROERIG 

A division of Pfizer Pharmaceuticals
New York, New York 10017

Arthur lost



A single-dose, non-staining anthelmintic

his pinworms...



with just one non-staining dose of Antiminth (pyrantel pamoate) Oral Suspension.

Highly effective. Active against pinworm...and roundworm.

Non-staining. Doesn't stain teeth or oral mucosa on ingestion.

Doesn't stain stools, clothing or linen.

Simple dosage. Single-dose regimen: 1 cc. per 10 lbs. of body weight (1 tsp. per 50 lbs.).

Well-tolerated. Based on pre-introductory studies.

Pleasant-tasting. Easy-to-take, caramel-flavored oral suspension.

Economical. One prescription for the entire family.

Antiminth (pyrantel pamoate) Oral Suspension

Actions. Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuromuscular blocking property of the drug.

Antiminth is partially absorbed after an oral dose. Plasma levels of unchanged drug are low. Peak levels (0.05-0.13 µg/ml) are reached in 1-3 hours. Quantities greater than 50% of administered drug are excreted in feces as the unchanged form, whereas only 7% or less of the dose is found in urine as the unchanged form of the drug and its metabolites.

Indications. For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).

Warnings. *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

Precautions. Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with pre-existing liver dysfunction.

Adverse Reactions. The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia.

Skin reactions: rashes.

Dosage and Administration. *Children and Adults:* Antiminth Oral Suspension (50 mg. of pyrantel base/ml.) should be administered in a single dose of 11 mg. of pyrantel base per kg. of body weight (or 5 mg./lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 cc. of Antiminth per 10 lbs. of body weight. (One teaspoonful = 5 cc.)

Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day; and purging is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juices. Because of limited data on repeated doses, no recommendations can be made.

How Supplied. Antiminth is available as a pleasant tasting caramel-flavored suspension which contains the equivalent of 50 mg pyrantel base per ml., supplied in 60 cc. bottles.

ent:

new

ANTIMINTH[®]
(pyrantel pamoate)

equivalent to 50 mg pyrantel/ml

ORAL SUSPENSION

ROERIG **Pfizer**

A division of Pfizer Pharmaceuticals
New York, New York 10017

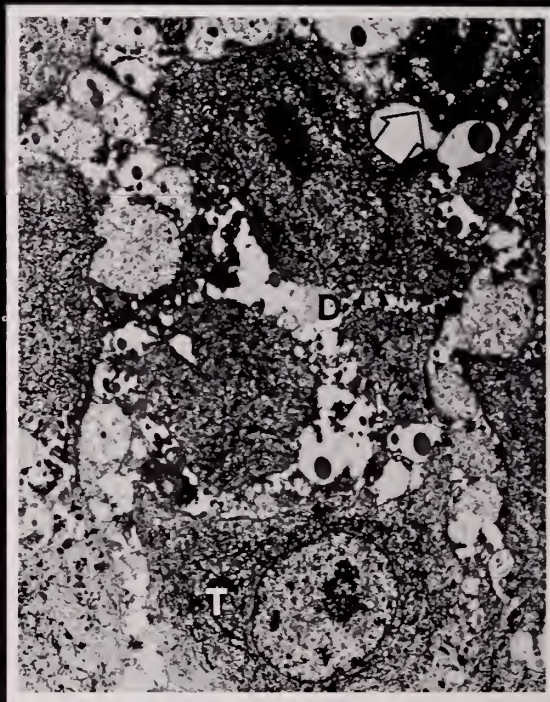
Efudex[®] (fluorouracil) works where it counts*...



Lesion #2—Two days after initiation of therapy. Electron micrograph of solar keratotic skin from patient's hand.

Typical abnormalities are:

Malpighian cells [containing an abundance of thick tonofibrils (T)] which are connected with well-developed desmosomes (D). Note the clumped tonofibrils in the so-called 'dyskeratotic' cell (arrow) indicative of solar keratosis. No change can be noted at this level after two days of therapy. $\times 5000$ (12/16/71)



Lesion #3—Two weeks after initiation of therapy. Electron micrograph of skin from patient's hand.

Improvement shown:

Less conspicuous desmosomes (D), widened intercellular spaces and Malpighian cells showing a remarkable reduction of tonofibrils (T). The arrow indicates a degenerating dyskeratotic cell. $\times 5000$ (12/31/71)

Solar, actinic or senile keratoses

By whatever name they may be known, they commonly occur as multiple lesions and chiefly on the exposed portions of the skin. Because they may be premalignant, it is generally agreed that they should be treated. Surgery, cryotherapy, or electrodesiccation may present certain drawbacks, both for the physician and the patient, but there is Efudex[®] (fluorouracil)—as an alternative to conventional therapy.

Sequence of therapy — Selectivity of response

The easily applied Efudex cream or solution usually begins to show effects within a few days—an erythema in the area of the lesions. Within two weeks after initiation of therapy, this reaction usually reaches its height of unsightliness and discomfort, declining after discontinuation of therapy. This reaction occurs in affected areas. Since the response is so predictable, lesions that do not respond should be biopsied to rule out the presence of a frank neoplasm.

x

Acceptable results

Treatment with Efudex (fluorouracil) provides highly acceptable cosmetic results posttherapeutically. The incidence of scarring is low.* This is particularly important with multiple facial lesions. Efudex should be applied with care near the nose, eyes and mouth.

5% cream/solution—a Roche exclusive

Only Roche formulates the 5% cream and solution—high in patient acceptability—economical—and higher in clinical efficacy than the 2% formulation for lesions of the hands and forearms.

*Data on file, Hoffmann-La Roche Inc., Nutley, New Jersey.



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Division of Hoffmann-La Roche Inc
Nutley, N.J. 07110

OKLAHOMA STATE MEDICAL ASSOCIATION

in treating solar keratoses which may be premalignant.



Before treatment — 12/14/71



**After treatment — Two weeks after
therapy stopped — 1/28/72**

**This patient's solar keratoses
responded to
Efudex (fluorouracil) 5%**

**Before prescribing, please consult complete product
information, a summary of which follows:**

Indications: Multiple actinic or solar keratoses.

Contraindications: Patients with known hypersensitivity to
any of its components.

Warnings: If occlusive dressing used, may increase inflam-
matory reactions in adjacent normal skin. Avoid prolonged
exposure to ultraviolet rays. Safe use in pregnancy not
established.

Precautions: If applied with fingers, wash hands immediately.
Apply with care near eyes, nose and mouth. Lesions failing
to respond or recurring should be biopsied.

Adverse Reactions: Local—pain, pruritus, hyperpigmentation
and burning at application site most frequent; also derma-
titis, scarring, soreness and tenderness. Also reported—in-
somnia, stomatitis, suppuration, scaling, swelling, irritability,
medicinal taste, photosensitivity, lacrimation, leukocytosis,
thrombocytopenia, toxic granulation and eosinophilia.

Dosage and Administration: Apply sufficient quantity to cover
lesion twice daily with nonmetal applicator or suitable glove.
Usual duration of therapy is 2 to 4 weeks.

How Supplied: Solution, 10-ml drop dispensers—containing
2% or 5% fluorouracil on a weight/weight basis, com-
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Insight Study Into Socialized Medicine

THIS QUITE POSSIBLY represents the most comprehensive picture of "grass roots" medicine practiced in the United Kingdom. The study was undertaken at the author's suggestion to the Department of Health, Education and Welfare and had the official sanction of Doctor Vernon Wilson, Director of Health Services and Mental Health Administration. The department is continually studying health care systems in socialistic countries and it was felt that the private sector of medicine should participate.

No phase of British consumer and provider health care was left 'untuned.' Approximately fifty British physicians, at all levels were interviewed in virtually every geographic area of Britain.

Ben Saltzman, MD, my fellow investigator and I were primarily interested in rural health care and general practice, however, we attempted to broaden the scope of our study into other areas as well. Doctor Saltzman, of Mountain Home, Arkansas, is a former chairman of AMA's Council on Rural Health, is past director of Rotary International and an active medical leader in Arkansas for many years. We visited hospitals, interviewed specialists on Harley Street, talked to retired older physicians and many, many British laymen . . . both at the poverty level and among influential, wealthy consumers. Some of the centers we visited had been studied by Senator Kennedy only two - three weeks prior to the author's study.

Great Britain is a country of approximately 58 - 60 million people and has had some form of government health service since 1912. Although the country is generally made up of socialistically-minded people, nowhere is individual initiative stifled as it is in the field of medicine.

Our itinerary was arranged by an employee of HEW who was on a sabbatical working for the Nuffield Trust in London (similar to the Ford Foundation). We felt the GP's we saw were handpicked, but not to the point of trying to control our agenda; only by their reputations of working within the system. All were excellent clinicians in

thought and argument, but they bogged down pitifully in practical application.

It cost us virtually as much to travel throughout England as in America, yet the average English physician's income is one-third to one-half of his American counterpart. When reminded that we felt Her Majesty was indeed getting a bargain from a highly-trained group as compared to other professions, they retorted that it was better than before 1948. How physicians knew this, one can only surmise . . . since most were still students at the time, but they readily came up with this stock answer.

In talking with British physicians one gets the eerie feeling that they have been coached and brainwashed due to the conformity of their answers. Behavior patterns and practice styles were so alike as to be almost depressing. It is impossible to assay how the freshness of originality of thought, as we know it in this country, would be affected until some lesser system is imposed upon American Medicine.

They were, to a man, very psychosomatically oriented in their responses to patients . . . kind, considerate, polite, sympathetic . . . reassurance is provided, scripts are written, work releases are issued . . . and they are told to "pop back in" if symptoms continue.

"Pop in" is just that—they have merely seen the patient, advised and dismissed him. As all Englishmen seem to be, patients are friendly, appreciative, rather docile, courteous, and somewhat anxious.

Only one of twenty physicians we visited and sat with on consultations examined as we are prone to do. No examination tables with stirrups were seen; though we did not see any pelvic examinations done. They are presumably done with the patient on her side. Pap smears are advised for patients over 35 years of age; then at five year intervals. This is undoubtedly good propaganda and money-saving.

The routine physical examination is absolutely not done and, in fact, is very much

discouraged. When chided about this, with some rather poignant figures concerning mortality statistics in cancer, all but one physician was unyielding. Rectal polyps were mentioned (very few proctoscopies are done by the GP) but once again, it was just as good to wait until symptoms appear. Routine chest x-rays were discussed and produced the same retort as before.

House calls are made quite frequently and treatment for many conditions is carried on in the home. Physicians readily accept this type of care and point to mortality and morbidity statistics in coronary thrombosis, pneumonia and other diseases to support the home care concept. I challenged one physician and asked about cardiac monitoring and intensive care rather than the treatment of coronary disease at home. Again I was shown statistics showing that home care, percentage-wise, was as good. My reply was, "Figures can't lie, although liars can figure."

During a house call the wife of the patient being treated for hypertension (the first blood pressure I had seen taken in four days of visiting) asked if an x-ray would help her husband. The physician did not reply, wrote a prescription, drew blood, and instructed the woman to mail the sample for him to a local pharmacy. She gratefully agreed. After leaving, the physician said "Evil people these, asking for an x-ray. I'll be the one to decide that. No trust in me at all."

The physician is absolutely Lord and Master and develops a patronizing and rather despotic attitude toward his patient, still within the bounds of very courteous and considerate behavior.

GPs do no lab work (except OB, UA's), no x-rays, no surgery, and are not allowed to follow the patient to the hospital or write orders. They may visit the patient as a friend and, strangely, they do not chafe under these restrictions.

For true emergencies, ready hospitalization seems to be quite available, but for elective surgery a four-month to two-year wait was reported.

The patient seems to give no thought of having to go elsewhere for lab and x-ray work, and a wait from one to three weeks

(depending on the severity of the case) does not trouble the patient. The physicians were asked about such time intervals and how this affected continuity of thought (leading to errors in diagnosis and treatment), but no logical solution was suggested.

Hospitals were toured and were adequate but antique in most cases. The local hospitals are comparable to our nursing homes and staffed much accordingly.

The whole of the country is delineated and set up in regions, districts and areas. No district or first rate hospital is over thirty to forty miles from the patient, and though not thoroughly investigated by us, these hospitals were said to have available all specialist-based physicians for treatment of any medical or surgical emergency.

Payment of physicians poses a complex and interesting problem. An average bonus of 400-500 pounds per year to practice in a rural area, 350 pounds per year to practice in a group, another base or two, then strictly on a capitation basis depending on how many patients are assigned.

One and one-half pounds are paid per patient, the average patient load per MD is 2,000 to 2,500 (we heard of one man with 5,000). Each physician must agree to accept 2,000 patients before his base pay is allowed. If a group accepts 5,000 to 10,000 patients they may be allocated in any manner. One MD may have 1,500 patients, another 2,500—as long as it averages out to 2,000 per man. If one owns his building, rent is paid. A base amount is allowed for help (staff) and the government pays 70%. Extra is paid for giving tetanus and pap smears plus other little incentives too numerous to mention. Suffice it to say the average GP in Britain makes \$12,500 per year.

Her Majesty's government is no fool; in keeping with tradition, law and order must be maintained and criminals dealt with properly. There is a police physician for each precinct, the job is a political plum and much sought after. The physician must go when called but is paid a rather handsome fee ranging from five pounds six pence (\$13.75) to nine pounds sixty pence (\$23.75). A riot with several injured, requiring three hours of care can easily net \$300 to \$400. This job is perhaps more lucrative in London than elsewhere.

At a Rotary make-up luncheon were six influential, alert, progressive men at my table—an architect, engineer, electronics expert, jeweler and department store manager. To a man the health system was decried.

The pitiful limitations of the GP, the abuse of his time with trivialities, the difficulty and almost impossibility of securing the advice of specialists were discussed. Once in a hospital there is uniform agreement as to the capability of specialist care, but there is doubt as to the availability of up-to-date, sophisticated equipment. These men all had private health insurance to assure care on demand.

In closing, it is my opinion that the unwary politicians and blinded bureaucrats in this country deserve socialized medicine. The people of America, though brainwashed by an unknowing press and TV, would never tolerate such a system. We hear much about whether we can afford *not* to have National Health Insurance. Bureaucrats daily play on minor incidents to incite a disenchantment with the best health care a nation ever had. Though minor deficiencies in health personnel exist, we must continue to resist socialization.

SUMMARY

1. British physicians are stereotyped, satisfied, capable, non-aggressive individuals truly dedicated to their patients but not interested in sophisticated techniques, nor inclined then to rock the boat.

2. The lower income patient is ill-informed and pleased over any attention. If care is free it must be good. Rural health care prior to World War II must have been very scarce, indeed. Middle to high income people are grossly dissatisfied—aware that they are being duped.

3. Restricted practices, such as specialized in-hospital practice, public health factions, and GP's in offices and homes leads to fragmentation and agonizing inefficiency.

4. Consumer prices are almost, if not as high, as in America, yet physicians' earnings are inferior. Government, by trusting false statistics, discourages costly procedures as being no better than lesser methods. Innovation and research at all levels are very trite and almost non-existent.

5. British medicine is years behind and worlds apart from the American free enterprise system.

6. Physicians have indeed learned to economize, but this is at the expense of the patient. The benefits of scientific progress are generally not available. *Ed L. Calhoon, MD* □

Nobody Votes in My Town

By Pete Simer

AS ANOTHER presidential election day approaches, probably never before was so much at stake in America. But nobody votes in my town and most of my 3,700 townsmen apparently are chronic misfits who couldn't care less. My town is "Jacktown"—Southern Michigan Prison, near Jackson.

Now, in the morning chow line, a young murderer and a middle-aged burglar seem ready to tangle in an argument on the merits of the Republican Party. An alert guard breaks it up just in time.

The burglar is serving his fifth term in my town. I know him well. So, after he cools off, I needle him a bit, saying, "I take it you voted for Hubert Humphrey."

"You kiddin'?" he scowls. "Man, I never voted in my life. I got sense enough to know no matter who gets elected, the best any little guy's gonna get is the worst of it. The hell with votin'!"

That's seditious philosophy, isn't it? "The hell with votin'!" means down with democracy, your country, your government and, consequently, every home (where government really begins) in the land.

Yet, I have been guilty of comparable "sedition." It came out disguised something like this: "Didn't get around to voting; had too many other things to do on election day." The reflection isn't easy to face, now that I have been stripped of my voting rights for many elections to come.

I begin to wonder how my neighbors feel about not being allowed to vote. Later, I question nearly 300 of them. Almost 90% merely shrug or otherwise indicate lack of concern. Eighty individuals admit that they had never voted! (Could the deeds that landed us here be germane to such disregard for democracy?) Consider three responses

(Continued on Page xiii)



By the time this is published, the election of 1972 will be just two weeks away. To paraphrase George Washington: the time is now near at hand which will determine if American doctors are to be free men or slaves. This upcoming

general election should be decisive. Whether we win or lose will depend on the hard work of each physician between now and election day.

On a recent visit to Oklahoma City, Doctor Russell Roth, President-Elect of AMA, stated that the National Health Security Act has been down-graded in priority in the Senate Committee making it unlikely that this bill will be passed in the next two years. This down-graded priority did not indicate a decrease in pressure, but only a realization that the Federal Government just cannot afford socialized medicine. The fact that they could not afford a program has seldom been a deterrence to Congress in the past. Therefore, we must not be complacent. In addition, Doctor Roth stated that, of course, this delay depends a great deal on what kind of Congress we elect this November.

As you all know, your leadership in the Oklahoma Medical Political Action Committee has been hard at work. We have increased OMPAC memberships to the point that Oklahoma has the highest percentage of members of any state in the union. At the State level, OMPAC has rated the candidates as friends or foes of medicine and medical education based on their voting records in the senate or house. We have accumulated a War Chest for candidate support and have used the money according to the above rating system.

In the primary election OMPAC backed 17 candidates and 15 were elected. This, we think, is an excellent track record.

At the National level we are being helped inadvertently by the immense unpopularity of George McGovern's confused campaign for President. There is no way that candidates who embrace the philosophy of McGovern can be a friend of medicine. It is amusing that local Democrat candidates live in fear that McGovern may visit their states and help with their campaigns. The F.B.I. used to list the ten most wanted criminals and the top man might be wanted in perhaps five states. McGovern has the distinction of not being wanted in 35 states.

The Oklahoma Democrat Party has first invited Senator Kennedy to help campaign, then promptly withdrew the invitation. We think this is rude and does not display the proper Oklahoma hospitality. During this campaign Senator Kennedy has the distinction of not being wanted in 42 states, so if the invitation is renewed it will have to be by Republican candidates.

On election day we must vote ourselves and be certain that our families, cousins, uncles, and aunts vote as well as our office assistants and their families. We have campaigned diligently and so far have had excellent results. Many politicians who have no friend of medicine or medical education in the legislature and senate will have an opportunity to hoe cotton and think over their voting records during the past many years, before contemplating filing for another office.

If, as Doctor Roth hopes, socialized medicine will not be passed in this Congress, then we can add the results of this year's primary, run-off, and general election to the off-year election of 1974. If we missed on a recalcitrant candidate this year, we will have another "bloody go" in 1974. ☐

S.R. McCannell, MD

Diabetic Retinopathy

C. P. WILKINSON, MD

The increased life expectancy of diabetics is resulting in a profound increase in blindness due to the retinal vascular complications of this systemic disease.

ADVANCES in medical care have dramatically extended the life expectancy of diabetic patients and provided more time for them to reproduce; thus the prevalence of diabetes has increased tremendously and resulted in an ever expanding genetic pool. Similarly, the retinal vascular complications of diabetes have become more common, since the incidence of diabetic retinopathy tends to be directly proportional to the duration of the systemic disease. Although relatively few diabetics have retinal changes at the time their disease is diagnosed, more than 90% of patients who have had diabetes for 20 years can be expected to exhibit some manifestations of vascular disease in their fundi. Diabetic retinopathy is the number one cause of reduced vision due to a systemic disease and is responsible for nearly 20% of the blindness in the United States.¹ This percentage is higher if only blind patients between 21 and 60 years of age are considered.² A diabetic is from 10 to 15 times more likely to become blind from retinopathy

than a non-diabetic from all causes of blindness,³ and the number of blind diabetics is expected to more than double in the next 30 years unless this ocular disorder is better controlled.⁴

The purposes of the first portion of this paper are to describe the clinical manifestations and natural course of diabetic retinopathy. Part II, to be published in this *Journal* next month, will discuss current methods of management.

Diabetic fundus changes are classically divided into two groups, background retinopathy and proliferative retinopathy. The former classification refers to any combination of diabetic retinal lesions which does not include new vessels. The second group includes all eyes with neovascularization, regardless of what other changes are observed. In most cases, some manifestations of background retinopathy precede the development of the more severe proliferative form.

The specific lesions of background diabetic retinopathy will be considered under separate headings, but it should be emphasized that virtually any combination and number of such changes can be observed in a given fundus. The earliest vascular lesions of diabetic retinopathy may be quite subtle, and their detection has been made possible by the relatively new technique of fluorescein angiography, a procedure in which intravenously injected fluorescein may be observed and photographed as it passes through the intraocular blood vessels.

The present method of fluorescein photog-

raphy was devised by Novotny and Alvis⁵ in 1961 and utilizes selective filters in a fundus camera. The optimal activating wave length for fluorescein is approximately 490 nanometers and in the blue range. Therefore, the flash attachment has a blue filter in front of it. The peak emission wave length of fluorescein is 520 nanometers and in the green spectrum, and a yellow filter is placed in front of the film to inhibit the transmission of any blue light and allow only light emitted from the stimulated fluorescein to reach the film. Following an intravenous injection of a 5 cc bolus of a 10% fluorescein solution in the antecubital vein, the dye appears in the eye in eight to fourteen seconds. Rapid sequence black and white photographs are taken as the dye circulates through the retinal and choroidal vessels. In this way a documented *in vivo* study is obtained. Under good conditions, the retinal capillary bed, as well as the larger clinically visible vessels, may be studied.

The earliest apparent changes in diabetic retinopathy can be observed only with the use of fluorescein and consist of a closure of retinal capillaries and, peripheral to these occlusions, small areas of avascular retina, usually surrounded by groups of tiny microaneurysms. At a later stage atypical capillaries are often observed passing through the areas which are no longer supplied by the normal retinal capillary plexus.⁶ Microaneurysms are usually the first unequivocal lesions of diabetic retinopathy which can be detected during routine ophthalmoscopy.⁷ They are small out-patchings on retinal capillaries and appear as small red dots measuring approximately 30 to 100 microns in diameter and occurring primarily in the posterior retina, usually initially temporal to the fovea. Fluorescein studies typically reveal a multitude of microaneurysms which are invisible using routine methods of examination. (Figs 1a & 1b) Microaneurysms spontaneously disappear at given sites, but there is a general tendency for their number to increase with the duration of the disease.⁸

Retinal hemorrhages in background diabetic retinopathy are typically small and rounded because they occur rather deep in

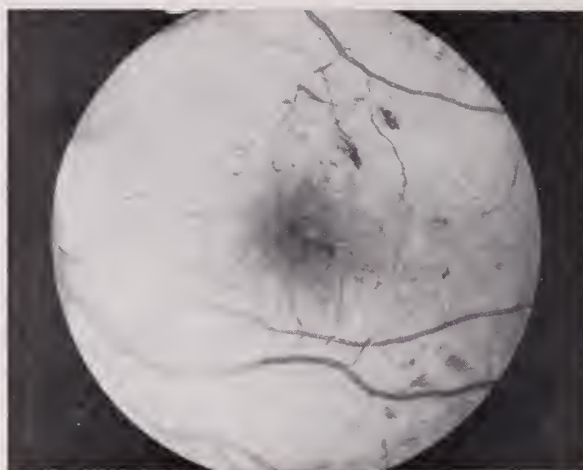


Fig 1a Background diabetic retinopathy, mild. Most of the tiny black "dots" are microaneurysms. A few larger "flame-shaped" hemorrhages are present superior to the macula.



Fig 1b Fluorescein angiogram of the same patient. The number of microaneurysms appears greater, and the lesions are much more distinct. Hemorrhages appear black since they do not contain significant concentrations of dye. The irregular indistinct white patches seen around the macula represent the leakage of dye from invisible capillaries and are indicative of retinal edema.

the retina. These "punctate" or "blot" hemorrhages may be extremely difficult to differentiate from microaneurysms, but the difference is of relatively little significance. The hemorrhages are probably a result of a loss of integrity of the capillary walls, and individual lesions typically fade after six to eight weeks. Hemorrhages in the anterior nerve fiber layer of the retina assume a "flame-shaped" configuration and are less common than those in the outer retina.

"Hard exudates" are very frequently seen

in background diabetic retinopathy and appear as small white or yellowish deposits of lipid material with irregular edges. They occur in the middle layers of the retina and are presumably a result of altered permeability of the retinal capillaries. The lipid deposits may occur as distinctly focal lesions or in a ring, or "circinate," form. The latter distribution of lipid often has a visible vascular abnormality located at the center of the ring. Exudates of this type typically wax and wane, although there is a tendency for them to increase in number with time. Vision is significantly affected only if the foveal or perifoveal areas of the retina are involved.

Retinal edema is an extremely common finding in cases of significant background diabetic retinopathy. This typically occurs in the posterior retina, involving the macula, and it is the primary cause of diminished vision in patients with only background retinopathy. It is rather difficult to appreciate with the monocular ophthalmoscope. The involved retina appears somewhat boggy and thickened, often taking on a grayish, semi-opaque quality. Edema may be expected when large amounts of hard exudates are observed, since it too is a result of permeability abnormalities in the retinal capillaries. In cases with significant intraretinal edema, an abnormal leakage of dye from nearby capillaries is usually quite apparent following the injection of fluorescein. (Fig. 1b) The amount of edema may fluctuate from week to week in a given patient.

"Cotton wool patches" or "soft exudates" occur with debatable frequency in diabetic retinopathy, uncomplicated by hypertension. These fluffy white lesions, which usually are from 1/8 to 1/4 disc diameter in size, occur in the nerve fiber layer and actually rep-

resent ischemic infarcts of this area rather than exudation. Isolated "cotton wool patches" typically disappear clinically a few months after their initial appearance.

Venous changes characteristically occur with diabetic retinopathy, although the specificity of such changes in early stages of the disease is controversial. Many authors have considered a diffuse and uniform distension of the larger veins as a primary or even "preretinopathic" finding. However, this is a sign which is usually subtle and which is non-specific for diabetic retinopathy. In more advanced cases, significant and unequivocal changes in the veins occur, consisting of segmental dilatation of the larger venous branches.

Arterial changes in background retinopathy are characteristically absent early in the course of the disease unless hypertension is present, although arteriosclerotic vascular disease is usually associated with the diabetic condition. An increase of the light reflex is common in moderately advanced retinopathy, but only in the relatively late stages does opacification of the vessel wall occur, producing a picture of "sheathing" and obscuring the blood column.¹⁰

Preretinal membranes occur with an increased incidence in diabetic retinopathy. This typically gives a glistening and cellophane-like quality to the inner surface of the retina, altering the reflex at this level. Occasionally these membranes contract, resulting in a picture of fine striae radiating outward from the center of the membrane and giving the involved area a wrinkled appearance. The contraction of such membranes in the macular area not infrequently results in a moderate and significant loss of central vision.

Proliferative diabetic retinopathy is usually superimposed on the background lesions, and with the development of new vessels, the retina enters a much more precarious existence. The new vessel tufts usually appear on or around the nerve head (Figs 2a & 2b) or on the inner surface of the retina near the larger venous branches, but they may occur in virtually any location posterior to the equator and outside of the macula. The lesions tend to evolve in a characteristic, orderly manner, but tufts within a given eye may be in markedly different stages of de-

Since his graduation in 1966 from Johns Hopkins University School of Medicine, C. P. Wilkinson, MD, has been certified by the American Board of Ophthalmology. In addition to his private practice in Oklahoma City, Doctor Wilkinson is Assistant Clinical Professor of Ophthalmology at the University of Oklahoma College of Medicine. He is a member of the Society of Heed Fellows.



Fig 2a Proliferative diabetic retinopathy with new vessels arising from the optic nerve head.



Fig 2b Fluorescein angiogram of the same patient. The structure of the vascular tuft is more apparent. Such vessels leak fluorescein profusely in the later stages of a given study.

velopment. Initially, fine naked vessels without supporting connective tissue arise from capillary plexuses on the nerve head or near the inner surface of the retina. Their presence is not preceded by vitreous hemorrhage, and they initially grow on the inner surface of the retina or disc, and only rarely extend into the vitreous cavity. As the vascular tufts increase in size, there is a tendency for connective tissue to become associated with the naked fronds, giving them a "fibrovascular" appearance. In addition, adhesions characteristically form between these tufts and the vitreous framework. Until this stage, patients may remain totally asymptomatic, and any vitreous bleeding which oc-

curs from the fragile vessels is typically mild. However, with contraction of the vitreous (that is, movement of the posterior vitreous surface forward), severe traction on the new vessels typically results in severe and recurrent vitreous hemorrhages associated with a continued growth of new vessels into the vitreous cavity in a three dimensional fashion. Such traction may also result in severe retinal detachments.

Perhaps 10% of eyes with severe proliferative retinopathy ultimately enter a phase in which there is a significant regression in the number and size of the new vessels, a definite decrease in the caliber of such vessels, often resulting in complete obliteration of the vascular lumen, and an increase in the connective tissue density.¹² In addition, increased attenuation and opacification of the wall of the "normal" retinal vessels and mild optic atrophy are observed. Although many eyes undoubtedly progress to this "arrested" phase, a large percentage have little useful vision. It is extremely interesting that in diabetic patients with unilateral optic atrophy, advanced glaucoma, or widespread peripheral chorioretinal degeneration, proliferative changes appear to be inhibited at a time that the more normal fellow eyes have shown advanced neovascularization.¹³ Such diseased eyes mimic diabetic eyes which have reached the "arrested" stage in that, in both conditions, attenuated vessels, optic atrophy, and an apparently diminished need for a vascular supply are observed. Theoretically, changes in the retinal metabolism in both situations may inhibit the formation or continued growth of new vessels. This point may have significance in terms of therapy.

The development of diabetic retinopathy occurs at a variable rate, and documented remissions of all of the forms of the disease have been observed. Nevertheless, there is a definite tendency for the disease to progress in severity with time. In spite of the multitude of studies documenting the progression of this disease, the basic pathogenesis of the problem remains unexplained. Most histologic studies of diabetic retinas are in agreement that the basic changes observed are acellular and apparently obliterated capillaries occurring adjacent to microaneurysms and dilated capillaries. The sequence of events leading to this picture has

been debated. Most authors now feel that the primary event is an obliteration of capillaries on the arterial side of the vascular bed which is then theoretically followed by secondary dilatation of adjacent blood vessels to accommodate a greater flow of blood.¹⁰ Others have proposed a "shunt hypothesis," proposing that the initial change is a loss of capillary pericytes, resulting in dilatation of the given capillary with increased flow through it, and a "steal" of blood from the surrounding capillaries, resulting in secondary atrophy and obliteration.¹⁴ As noted previously, fluorescein studies correlate well with pathological findings and have documented focal areas of capillary closure, typically surrounded by microaneurysms, and dilated tortuous "shunt vessels" have also been observed traversing the ischemic areas. Nevertheless, neither pathologic material nor current clinical methods of examination have revealed the definite sequence of events which occur in the earliest stage of diabetic retinopathy.

NATURAL COURSE

As noted above, the incidence of diabetic retinopathy is generally directly related to the length of the disease, and the natural course of the condition typically involves a generally symmetrical progression from mild retinopathy to severe retinopathy and a loss of visual acuity in both eyes. Nevertheless it must be emphasized that in atypical cases only minimal changes have been observed over periods of decades, and striking remissions of severe retinopathy have been documented. Marked and unexplained asymmetry may also occur. Such variations in the natural history of the disease must be considered when the efficacy of various forms of treatment of retinopathy are discussed.

Certain general aspects of the natural course of the disease are generally accepted: From the time the diagnosis of diabetes is made, juvenile diabetics tend to retain vision longer than adult onset diabetics.³ In all groups, patients with good visual acuity at the start of a prospective study retained vision longer than those with diminished vision.³ Background retinopathy typically results in a less profound loss of visual acuity

than the proliferative form, and it is the most common cause of diminished vision in the adult onset group.⁹ Legally blind diabetics, whatever their age, are seriously ill, for the mean survival time from the onset of blindness in both eyes is six years.¹⁵

Specific figures on the natural course of diabetic retinopathy vary, but the best studies to date are probably those of Caird and Associates.³ In patients under 30 years of age with background diabetic retinopathy and a visual acuity of 20/40 or better in both eyes, there is only a 3% chance for vision to deteriorate to 20/200 or less, bilaterally, in five years. If the patients are over 60 years of age, however, the chances are increased to 20%. The chances of blindness are from three to five times greater in eyes with a vision of less than 20/40 when the patients are first seen. The chances of visual deterioration in proliferative retinopathy are on the order of 10 times greater than those in the background group. In five years 30% to 40% of the patients under 30 years of age with initially good visual acuity become blind bilaterally, whereas the figure for those older than 60 years is from 40% to 60%. The difference between those with initially good vision and those with impaired vision which was noted in the background group is not evident in the series of proliferative retinopathy, suggesting that no long period of low risk of visual loss occurs in the latter group once new vessels are observed. The prognosis is worse in patients with new vessel tufts on or near the nerve head than those in whom neovascularization is located more peripherally.

Figures on the average length of time required to proceed from mild background diabetic retinopathy to significant proliferative changes are not readily available and would be expected to have a tremendous range. Beetham¹² reported that an average of 15 years passed after the diagnosis of diabetes in the maturity onset group before proliferative changes developed, whereas in the juvenile group, the average interval was 20 years. Berkow¹⁵ recorded a 17.4 year average duration from the time diabetes was diagnosed in patients under 20 years of age to bilateral blindness. Regardless of the time required to develop new vessels and the extent of the neovascularization, once a vit-

Retinopathy / WILKINSON

reous hemorrhage has occurred in even one eye, the prognosis for vision in either eye becomes poor. In Caird's series, only 31% of patients had a vision of 20/40 in the better eye one year following a unilateral vitreous hemorrhage, whereas one-third were less than 20/200 bilaterally. Interestingly, the latter figure increased only 10% in the following four years. The study of Patz and Berkow¹⁶ further documents this point. In a study on visual acuity in the second eye of diabetics who had lost useful vision in the first, 59% were noted to become blind in the second eye within 12 months of the initial loss of vision. An additional 30% lost vision in the second eye over the next four years. It therefore appears that many patients tend to go through a rather symmetrical period of increased risk, after which the chances of further deterioration become less. Quite obviously, any diabetic presenting with a vitreous hemorrhage is in danger of losing vision in both eyes in the near future.

SUMMARY

In summary, studies on the natural course of diabetic retinopathy indicate that patients with background diabetic retinopathy and good visual acuity tend to do well for at least a few years, whereas once proliferative changes develop, the chances of a more rapid severe deterioration in vision increase significantly. Implications of such studies are that for treatment to be optimally effective in proliferative retinopathy, it should be applied soon after the development of new ves-

sels, regardless of the patient's visual acuity. On the other hand, treatment of patients with background diabetic retinopathy and good visual acuity will have to be extremely efficient to improve the prognosis for vision in the following few years. □

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and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Rarely, necrotizing vasculitis, paresthesias, icterus, pancreatitis, and xanthopsia have occurred with thiazides alone.

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The following patient profiles represent typical clinical situations, but do not necessarily represent actual cases.

Age 22, previously normal menses with occasional menorrhagia. Now on a sequential O.C. for four months. Complains of heavy flow, occasional intracyclic bleeding, edema, tender swollen breasts.

Indicates estrogen excess.

1st choice: Switch to a combination 50-mcg -estrogen O.C. (such as **Demulen**[®]).

Age 19, small breasts, minor hirsutism, oily hair and skin. History of metrorrhagia, skipped or scanty menses. New user.

Indicates androgenic excess or estrogen deficiency (fertility is suspect).

1st choice: An estrogen-dominant O.C. (such as **Enovid-E**[®]).

Age 25, average frame, poor complexion. No problem with menses, normal para 1. On a low-estrogen/high-progestogen O.C. for two years. Now complains of scanty flow, decreased libido, depression.

Indicates probable buildup of progestogen-related side effects.

1st choice: Switch to a center-spectrum O.C. with more estrogen, less progestational activity (such as **Ovulen**[®]).

Age 21, short, mammosome, with normal menses, some acne. Was put on pre-nuptial regimen of 50-mcg -estrogen/moderate-progestogen O.C. for two months. Now has increased acne.

Indicates metabolic production of androgen or relative estrogen deficiency.

1st choice: Switch to a 100-mcg -estrogen combination (such as **Enovid-E**[®] or a sequential).



Unmasked, physiologically and anatomically, they're not all the same. A basic difference lies in their hormone profiles. One may secrete too much estrogen, another not enough...or perhaps too much androgen; the vast majority would fit somewhere into the broad center spectrum.

Although the profiles described below may not be completely predictive, in optimal O.C. selection, the estrogen-progestogen activity ratio should be carefully matched to the patient profile. Searle offers you O.C.s in a range not only suitable for your patients in the balanced center spectrum, but also adaptable to the patient with another type of hormone profile.

Oral contraceptives are complex medications. Among the commonly reported adverse reactions are: intracycle bleeding, fluid retention, tender or swollen breasts, exacerbation of acne condition, changes in libido, amenorrhea while on medication and upon discontinuance, nausea, leg cramps, headaches, weight gain. Therefore, after reference to the prescribing information, oral contraceptives should be prescribed with care.

*Note: In some patients any level of exogenous estrogen or progestogen may produce symptoms of excess hormone activity.

Age 25, tall, slender, athletic, with flat chest. On a progestogen-dominant 50-mcg -estrogen O.C. Has recurrent trichomoniasis and Monilia.

Indicates estrogen deficiency and excess of progestogen in current O.C.

1st choice: Switch to a combination pill with 100 mcg estrogen and less progestational activity (such as **Enovid-E**® or **Ovulen**® or a sequential).

Age 23, "Miss America" figure, previously normal menses, healthy skin and hair. On a 50-mcg -estrogen pill for four months. Complains of intracyclic bleeding.

Indicates probable need for more estrogen.

1st choice: Switch to a center-spectrum O.C. with more estrogen and moderate progestogen dominance (such as **Ovulen**®).

Age 21, college senior, average build. On highly progestogen-dominant/low-dose-estrogen O.C. for six months. Now complains of amenorrhea, between-cycle headaches, weight gain.

Indicates probable progestogen excess.

1st choice: Switch to a center-spectrum pill (such as **Ovulen**®).

Age 27, slightly overweight, multiparous. Nausea with all three pregnancies and with a sequential O.C. three years ago. Has premenstrual fluid retention and leg cramps.

Indicates probable excess of estrogen.

1st choice: A 50-mcg -estrogen/progestogen-dominant pill (such as **Demulen**®).

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For a brief summary of prescribing information, please see next page.

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the right pill to the right patient

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Each pink tablet in Ovulen-28® and Demulen®-28 is a placebo, containing no active ingredients.

Actions—Ovulen and Demulen act to prevent ovulation by inhibiting the output of gonadotropins from the pituitary gland. Ovulen and Demulen depress the output of both the follicle-stimulating hormone (FSH) and the luteinizing hormone (LH).

Special note—Oral contraceptives have been marketed in the United States since 1960. Reported pregnancy rates vary from product to product. The effectiveness of the sequential products appears to be somewhat lower than that of the combination products. Both types provide almost completely effective contraception.

An increased risk of thromboembolic disease associated with the use of hormonal contraceptives has now been shown in studies conducted in both Great Britain and the United States. Other risks, such as those of elevated blood pressure, liver disease and reduced tolerance to carbohydrates, have not been quantitated with precision.

Long-term administration of both natural and synthetic estrogens in sub-primate animal species in multiples of the human dose increases the frequency of some animal carcinomas. These data cannot be transposed directly to man. The possible carcinogenicity due to the estrogens can be neither affirmed nor refuted at this time. Close clinical surveillance of all women taking oral contraceptives must be continued.

Indication—Ovulen and Demulen are indicated for oral contraception.

Contraindications—Patients with thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia and undiagnosed abnormal genital bleeding.

Warnings—The physician should be alert to the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism and retinal thrombosis). Should any of these occur or be suspected the drug should be discontinued immediately.

Retrospective studies of morbidity and mortality conducted in Great Britain and studies of morbidity in the United States have shown a statistically significant association between thrombophlebitis, pulmonary embolism, and cerebral thrombosis and embolism and the use of oral contraceptives. There have been three principal studies in Britain^{1,3} leading to this conclusion, and one⁴ in this country. The estimate of the relative risk of thromboembolism in the study by Vessey and Doll³ was about sevenfold, while Sartwell and associates⁴ in the United States found a relative risk of 4.4, meaning that the users are several times as likely to undergo thromboembolic disease without evident cause as nonusers. The American study also indicated that the risk did not persist after discontinuation of administration and that it was not enhanced by long-continued administration. The American study was not designed to evaluate a difference between products. However, the study suggested that there might be an increased risk of thromboembolic disease in users of sequential products. This risk cannot be quantitated, and further studies to confirm this finding are desirable.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions medication should be withdrawn.

Since the safety of Ovulen and Demulen in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the time of the first missed period.

A small fraction of the hormonal agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect to the nursing infant cannot be determined at this time.

Precautions—The pretreatment and periodic physical examinations should include special reference to the breasts and pelvic organs, including a Papanicolaou smear since estrogens have been known to produce tumors, some of them malignant, in five species of subprimate animals. Endocrine and possibly liver function tests may be affected by treatment with Ovulen or Demulen. Therefore, if such tests are abnormal in a patient taking Ovulen or Demulen, it is recommended that they be repeated after the drug has been withdrawn for two months. Under the influence of progestogen-estrogen preparations pre-existing uterine fibromyomas may increase in size. Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation. In breakthrough bleeding, and in all cases of irregular bleeding per vaginam, nonfunctional causes should be borne in mind. In undiagnosed bleeding per vaginam adequate diagnostic measures are indicated. Patients with a history of psychic depression should be carefully observed and

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the drug discontinued if the depression recurs to a serious degree. Any possible influence of prolonged Ovulen or Demulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. A decrease in glucose tolerance has been observed in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving Ovulen or Demulen therapy. The age of the patient constitutes no absolute limiting factor, although treatment with Ovulen or Demulen may mask the onset of the climacteric. The pathologist should be advised of Ovulen or Demulen therapy when relevant specimens are submitted. Susceptible women may experience an increase in blood pressure following administration of contraceptive steroids.

Adverse reactions observed in patients receiving oral contraceptives—A statistically significant association has been demonstrated between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism and cerebral thrombosis.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement and secretion), change in weight (increase or decrease), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, rash (allergic), rise in blood pressure in susceptible individuals and mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema nodosum, hemorrhagic eruption and itching.

The following laboratory results may be altered by the use of oral contraceptives: hepatic function: increased sulfobromophthalein retention and other tests; coagulation tests: increase in prothrombin, Factors VII, VIII, IX and X; thyroid function: increase in PBI and butanol extractable protein bound iodine, and decrease in T³ uptake values; metyrapone test and pregnanediol determination.

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Indication—Enovid-E is indicated for oral contraception.

The Special Note, Contraindications, Warnings, Precautions and Adverse Reactions listed above for Ovulen and Demulen are applicable to Enovid-E and should be observed when prescribing Enovid-E.

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Epidemiology of Urinary Bladder Cancer in Oklahoma

NABIH R. ASAL, PhD
STANLEY W. FERGUSON, PhD

A significant increase in bladder cancer mortality with degree of urbanization was found among the Oklahoma white males. Also, a decrease in the mortality experienced by the Oklahoma Indians during this study period was observed to be a significant finding.

URINARY BLADDER CANCER is one in which environmental agents have been shown to be very important in the etiology of the disease and in reducing the risk among those exposed. Although the total death rates for bladder cancer for both males and females in the U.S. and Canada have shown no increase in recent years, the incidence rates for males have increased while those for females have decreased. Males experience higher rates than females in both morbidity and mortality statistics. This sex differential appears to be a universal phenomenon. Also, bladder cancer rates appear to be increased in urban communities over rural communities.⁷

Mortality data from bladder cancer ex-

hibit small variations in rates among different countries. The disease appears to be low in Japan and high in England and Wales, Scotland, Denmark and the white U.S. population. In the light of the variations that exist in international mortality, racial differences in the United States show unusual trends. Among the U.S. males, both mortality and incidence are higher for whites than for nonwhites; however, among the females, the higher death rates appear in the nonwhite population. Other racial and ethnic groups such as the Japanese, Chinese, American Indians and the foreign born report lower mortality from bladder cancer than the U.S. white males or native born.¹¹

An association between cigarette smoking and bladder cancer has been reported by several investigators.^{11, 12, 13, 17} However, this association does not seem to be as strong as the one documented between smoking and lung cancer. In bladder cancer the association with cigarette smoking has been found only among male patients and not among female patients. Other variables associated with an increase in risk of developing bladder cancer are religion and marital status. The rates for white Protestants are higher than other faiths and the rates for single and divorced males are higher than the married.¹¹ Examination of the frequency of bladder cancer among relatives of cases revealed no familial aggregation of the disease.^{11, 17}

Bladder cancer has been reported in increased frequency among certain occupational groups. For instance, several studies have

From the Department of Biostatistics and Epidemiology, College of Health, University of Oklahoma Health Sciences Center, and from the Epidemiology Division of the Oklahoma State Department of Health.

demonstrated that contact with benzdine, α -naphthylamine, β -naphthylamine, magenta, and auramine results in many more bladder tumors in workers exposed than in the general population.⁴ This increase in risk has been dramatically demonstrated in several reports from England and Wales among workers employed in the rubber and dye industries,^{4, 5} and since the manufacture of β -naphthylamine, the most potent compound, was banned, there appears to be a drastic reduction in the risk as reflected in mortality statistics.⁴ No consistent evidence has been found to implicate aniline as an occupational hazard in bladder cancer.^{3, 4, 17} Shoe repairers and leather workers are two occupational groups reported to be at an increased risk of developing bladder cancer.¹⁷ Other occupations that involve painting, hairdressing, textile operations, coal mining and plumbing are suspected as potential hazards.¹⁷ Urinary metabolites^{2, 15} as well as bladder stones¹⁷ have also been implicated in bladder cancer etiology.

Though unimportant in the U.S., schistosomiasis continues to be an important contributing factor in the development of cancer of the bladder in countries where the prevalence of this parasite is high.¹⁰ In Egypt, for instance, bladder cancer accounts for about 11% of the total cancer deaths, with about 73% of the cases under 50 years of age.¹ Squamous cell carcinoma of the bladder is usually the cell type associated when schistosomiasis is a possible suspected etiological factor as in the South African Bantu.⁹ On the other hand, among the Uganda Africans, only 34% of cancer of the bladder is squamous cell in origin. Here, no direct association with schistosomiasis has been found but chronic urinary retention has been found to be an associated etiological factor.⁸

In the United States, aromatic amines will continue to be a significant public health problem in carcinoma of the bladder, especially since the use of these substances in food and cosmetic dye (as impurities) extends this environmental hazard to the general population.¹⁰

The purpose of this report is to document the epidemiology of bladder cancer in Okla-

homa based on mortality data occurring in Oklahoma between 1956 and 1970 and to determine if the geographic and secular variations of the disease delineate areas for further epidemiologic research.

METHOD OF PROCEDURE

Mortality data were obtained from death certificates filed in the Office of Vital Statistics, Oklahoma State Department of Health. Information from all resident death certificates filed between 1956 and 1970 indicating bladder cancer as the underlying cause of death was transferred to IBM cards for tabulation. The international classification of disease code revised in 1955 and 1965 was used for the purpose of separating bladder cancer deaths from other cancer deaths. Utilization of both revisions was warranted since the Oklahoma State Department of Health adopted the 1965 revision during the 1969 and 1970 calendar years and since there were major changes in coding for bladder cancer between the 1955 and 1965 revisions. For example, the international statistical classification (ISC) code 181 was used on data collected from 1956 to 1968 as recommended by the Seventh Revision, while the ISC Code 188 was used on data collected during 1969 and 1970 as recommended by the Eighth Revision.

The data were analyzed according to sex,

Nabih R. Asal, PhD, graduated from the University of Oklahoma School of Health in 1968, where he is now Assistant Professor of Epidemiology. Doctor Asal is a member of the Society For Epidemiologic Research, the American Public Health Association and the New York Academy of Sciences.

Stanley W. Ferguson, PhD, is State Epidemiologist of the Oklahoma State Department of Health. He was graduated from the University of Oklahoma Health Sciences Center in 1970, where he is now an Assistant Professor of the Departments of Medicine and Epidemiology. Doctor Ferguson is a member of the Infectious Diseases Society of America, the Association of State and Territorial Epidemiologists and the American Public Health Association.

race, and year of death for the purpose of establishing secular trends. Annual death rates by sex for the total population as well as average annual death rates for the three five-year periods (1956-1960, 1961-1965, and 1966-1970) were also computed so that time trends could be examined annually and for the three five-year time periods.

Bladder cancer deaths and death rates by age, sex, and race for the 15-year period studied are presented so that the distribution of deaths by the age groups <35, 35-44, 45-54, 55-64, 65-74 and 75+ could be shown for white males, white females, non-white males, and nonwhite females.

The Oklahoma resident population by age, sex, race and county was estimated from the 1950, 1960 and 1970 population censuses.

Ideally, we would like to determine whether the disease frequency formed patterns of irregular distribution or was randomly distributed within the State of Oklahoma among the seventy-seven counties. Therefore, based on the mortality experience of the total Oklahoma population from bladder

cancer over the 15-year period studied, the expected number of bladder cancer deaths was estimated for each county based on the proportion of people in the state living in that particular county. A standard mortality ratio was then tabulated for each county using the observed number of deaths for the particular county as the numerator and the expected number of bladder cancer deaths as the denominator. The ratio of observed to expected deaths was then multiplied by 100 to obtain the standard mortality ratio for the county. If the observed and expected number of deaths are equal, a standard mortality ratio of 100 would be obtained; while an excess of observed deaths would produce a ratio greater than 100 and thus, indicate an area of excess bladder cancer mortality. Conversely, a mortality ratio less than 100 indicates an area of low bladder cancer mortality.

In addition, average annual age-adjusted death rates by county for the 1956-1965 period were tabulated. The counties were divided into quartiles. Counties in the upper

Table 1
Bladder Cancer deaths by sex, race and year, and death
rates for the total population by year
Oklahoma, 1956 - 1970
(Rates Per 100,000 Population)

Year of death	White		Black		Indian		Total (deaths)		Total (rates)	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
1956	43	25	3	3	—	—	46	28	4.1	2.4
1957	40	19	4	1	—	1	44	21	3.9	1.8
1958	54	31	1	2	1	—	56	33	4.9	2.8
1959	53	26	2	1	1	—	56	27	4.9	2.3
1960	55	27	2	1	—	1	57	29	5.0	2.5
1956-1960	245	128	12	8	2	2	259	138	4.5*	2.4*
1961	36	23	4	4	1	1	41	28	3.5	2.4
1962	70	26	2	2	—	—	72	28	6.2	2.3
1963	63	37	7	2	—	1	70	40	6.0	3.3
1964	66	34	4	3	1	2	71	39	6.0	3.2
1965	64	30	5	3	—	—	69	33	5.8	2.7
1961-1965	299	150	22	14	2	4	323	168	5.4*	2.8*
1966	68	32	3	1	—	—	71	33	5.9	2.6
1967	69	32	3	4	—	—	72	36	5.9	2.8
1968	59	24	3	2	1	1	63	27	5.1	2.1
1969	70	41	7	5	1	—	78	46	6.3	3.5
1970	72	33	5	5	1	—	78	38	6.3	2.9
1966-1970	338	162	21	17	3	1	362	180	5.9*	2.8*
1956-1970	882	440	55	39	7	7	944	486	5.3*	2.7*

*Average annual rate

quartile were considered high counties while counties in the lower quartile were considered low counties. The presence of two or three adjacent counties in the upper quartile were considered a "cluster."

Another method was used to detect presence or absence of geographic clustering by examining the degree of association between rates for males and females. The presence of geographic clustering due to environmental factors would be indicated by the similarity between the male and female death rates. This degree of association or correlation between the male and female death rates was tested by the Kendall method.¹⁶

Differences between mortality in urban and rural areas were examined by grouping the counties of the state into metropolitan, non-metropolitan and rural counties such as:

1. 30,000-32,500 as metropolitan
2. 15,000-30,000 as non-metropolitan
3. Less than 15,000 as rural

The male and female average annual age-adjusted death rates by county were ranked and tested by the Kruskal-Wallis rank test.¹⁶

RESULTS

Bladder cancer deaths by sex, race and year as well as deaths and rates for the total population by year, from 1956 through 1970,

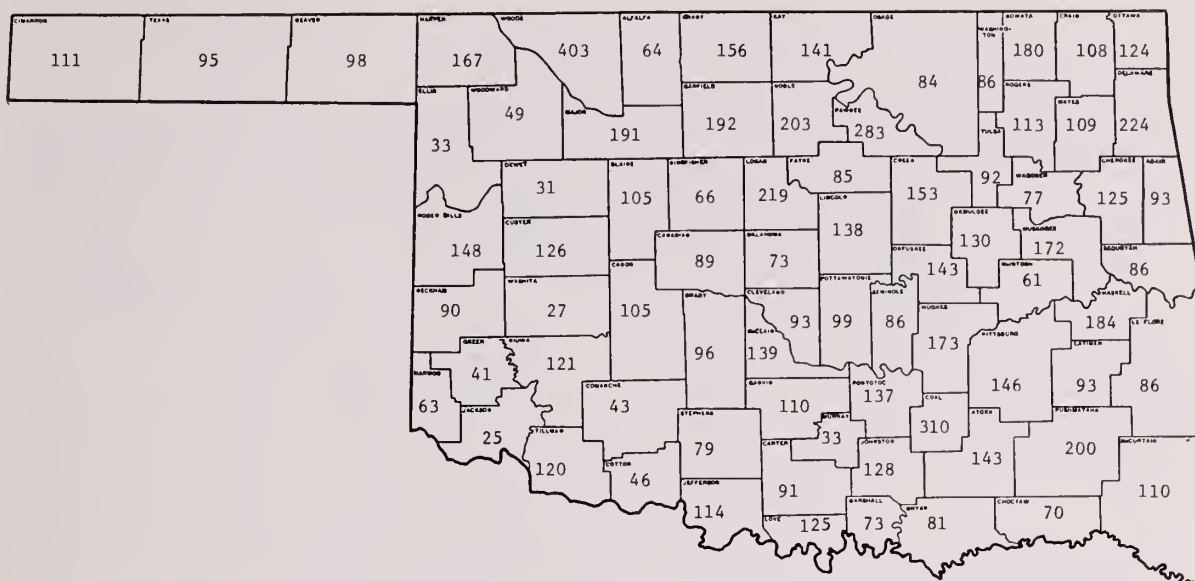
are presented in Table 1. Average annual death rates by five-year periods and for the fifteen-year study period are also presented. It is worth noting from the data presented in this table that the average annual death rates for bladder cancer are 5.3 and 2.7 for males and females respectively. The annual rates in males reflect a slight increase in mortality over the fifteen-year period. This increase is evident if we compare the average annual rates for the 1956-60 (4.5), 1961-65 (5.4), 1966-70 (5.9) time periods. This increase is also reflected in the total number of deaths occurring in each of the three, five-year periods. Though rates were not tabulated by race the data indicate that less than 8% of the total deaths occurred among the nonwhite population (108 of 1430). The nonwhite population is a mixture of blacks and Indians. Of the total population, blacks account for about 6.6% of the population, while the Indians number about 2.7%. However, the proportional death rate from bladder cancer by race is interesting in that 92.5% of the deaths occurred among the white, 6.6% among the blacks and only 1.0% among the Indian population. Also, the annual death rates for the white males are approximately twice the female.

In Table 2 we observe bladder cancer, age-sex-race specific death rates by three five-year periods as well as the age-adjusted death rates for the white males, white fe-

Table 2
Age-Sex-Race Death Rates for Bladder Cancer
Oklahoma: 1956-1970
(Rates Per 100,000 Population)

Age	White Male			White Female		
	1956-60	1961-65	1966-70	1956-60	1961-65	1966-70
35-44	0.7	1.5	2.4	1.4	2.2	0.8
45-54	14.3	12.1	12.8	5.6	7.6	4.6
55-64	49.4	69.1	55.6	17.0	24.9	15.1
65-74	132.9	147.5	164.2	46.7	43.4	53.7
75+	255.2	283.3	348.8	140.5	140.9	144.1
A.A.D.R.*	24.1	27.6	29.8	10.5	11.3	10.7
Age	Non White Male			Non White Female		
	1956-60	1961-65	1966-70	1956-60	1961-65	1966-70
35-44	0.0	10.1	0.0	0.0	0.0	0.0
45-54	19.9	10.0	0.0	0.0	8.4	7.8
55-64	60.7	90.6	52.2	45.3	20.1	34.3
65-74	49.3	110.7	147.5	78.7	118.0	77.7
75+	90.9	186.6	193.0	29.7	148.5	133.5
A.A.D.R.*	14.3	24.5	12.7	10.2	15.7	13.9

*Age adjusted death rates based on the 1960 state white males as the standard population.



1. Standard Mortality Ratios of Bladder Cancer in Oklahoma by County, 1956-1970.

males, nonwhite males and nonwhite females. Since very few deaths occurred before the age of 35 years, rates were calculated only for the age groups 35 and over. It is clear from the data that the period age-sex-race specific death rates increased exponentially with age, with the 75 years of age and older group experiencing the highest mortality. This increase is consistent for each of the four sex-race groups. The age-adjusted death rates show a consistent increase only for the white male population. This increase, however, was slight (24.1 to 27.6 to 29.8).

Figure 1 shows the geographic distribution of mortality as expressed in standard mortality ratios. Counties reporting standard mortality ratios above one hundred reflect an increase in the observed mortality above that which would have been expected had the Oklahoma experience prevailed equally for each of the counties in the state. Conversely, standard mortality ratios below 100 reflect a decrease in the observed mortality. Ratios that approximate 100 reflect a mortality experience similar to that for the state. It is obvious from data presented in Figure 1 that counties experiencing high or low standard mortality ratios from bladder cancer in Oklahoma are represented in every geographic area of the state. However, there appear to be a number of counties experiencing unusually high ratios worthy of mentioning. Woods county

experienced a SMR of about 403, Coal county 310, Pawnee 283, Delaware 224, Logan 219, Noble 203 and Pushmataha 200. These SMR's reflect an increase in the observed mortality over the expected by at least 100%. On the other hand the western and southwestern geographic areas of the state are over-represented by counties experiencing extremely low standard mortality ratios such as Jackson county 25, Washita 27, Dewey 31, Murray 33, Ellis 33, Greer 41, Comanche 43 and Cotton 46. These clearly reflect a decrease in the observed over expected greater than 50%.

Figures 2 and 3 are average annual age-adjusted death rates for each of the 77 counties. The white male geographic distribution of age-adjusted mortality shows the disease to be more prevalent in the North central counties of the state (Fig 2), while for white females, a random distribution is reported with one high rate area located in the south central counties (Fig 3).

Table 3 presents the mean, average, annual, age-adjusted death rates by sex of the white population and degree of urbanization for Oklahoma counties. The mean adjusted death rates increased with degree of urbanization from 4.0 to 4.8 to 6.6 for the males and from 2.2 to 2.1 to 2.4 for the females. This difference was significant for the females ($p = <.005$) and highly significant for the males $p = <.001$.

The Kendall rank correlation coefficient

used to detect the presence or absence of geographic clustering by examining the degree of association between white male and female death rates was 0.09154 and the Z value of 1.178 was found not to be significant, indicating an absence of geographic clustering due to environmental factors.

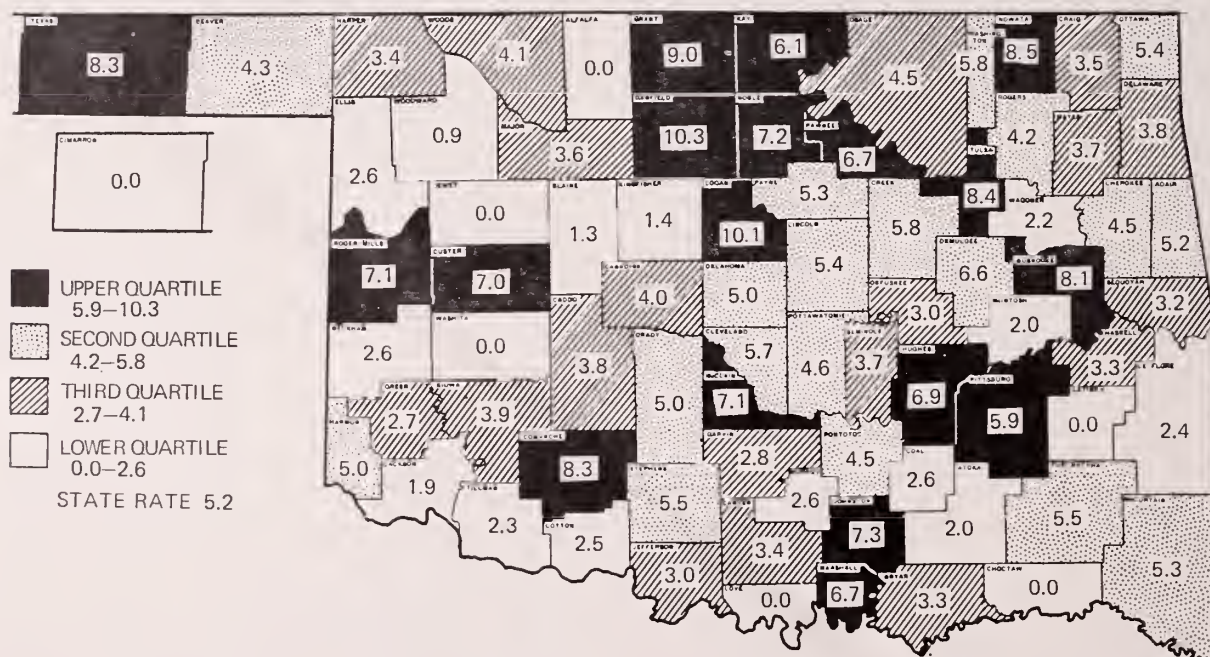
DISCUSSION

Some of the striking features reported in the literature on the epidemiology of bladder cancer are the small variations that exist in the age-adjusted death rates reported among countries, the increase in risk associated with occupational hazards and the mounting evidence that smoking is associated with this disease. In addition there are differences that exist in mortality from bladder cancer by age, sex, race, socioeconomic group and urban-rural population. Most of this evidence has been accumulating from several sources of data; from mortality as well as morbidity data, from case-control studies and from special types of studies in several communities by different investigators.

The findings of this study are consistent with the general epidemiologic features of this disease reported elsewhere. However, to better understand the results presented here it is worth examining some of the difficulties inherent in the interpretation of mortality data in general and bladder cancer in particular.

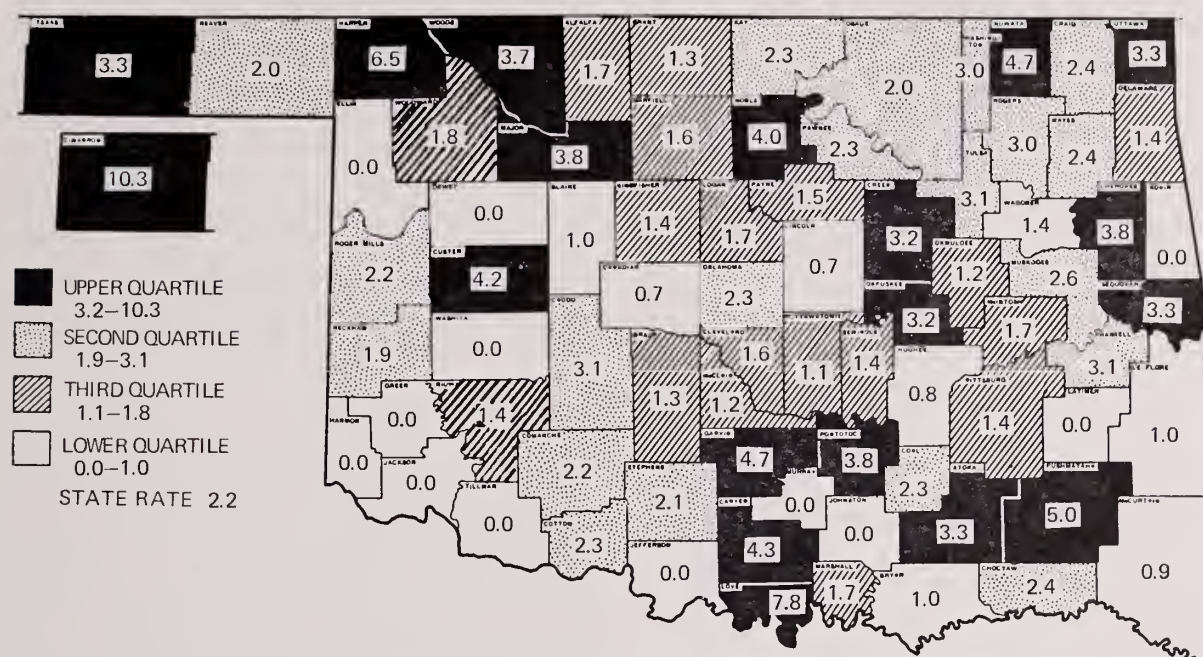
Mortality data give some information on the incidence of bladder cancer in Oklahoma but for obvious reasons this type of information is somewhat unreliable. There is the problem that arises from the early and efficient diagnosis and treatment of bladder cancer especially during the papilloma stage that often prevents the appearance of these cases on the death certificate. Hence mortality statistics, such as the data presented here, give us a biased estimate of the true incidence of the disease. Another factor to consider in interpreting mortality data from bladder cancer is the varying concepts and difficulties in distinguishing between benign and papillary tumors of the bladder which necessitated the World Health Organization Subcommittee on Cancer Statistics to recommend the inclusion of all cases of bladder cancer, benign and malignant, in the statis-

Average Annual Age Adjusted Death Rate
Oklahoma, 1956-65
Rates Per 100,000 Population



2. Average annual age-adjusted death rate for cancer of the bladder by County, Oklahoma. White Males, 1956-1965.

Average Annual Age Adjusted Death Rate
Oklahoma, 1956-65
Rates Per 100,000 Population



3. Average annual age-adjusted death rate for cancer of the bladder by County, Oklahoma. White females, 1956-1965.

tical tabulations. Unfortunately for the data presented here, the histological information was not available for us to ascertain the nature of these data.

Another major difficulty in interpreting data on bladder cancer based on mortality statistics is the fact that we have evidence to show now that more than one "cause" for this disease exists. Such causes as bilharziasis (non-existent in the U.S.), occupational industrial hazards, and smoking have been documented. The presence or absence of any of these factors in a given community or the level by which any of these factors operates to affect the frequency of this disease is difficult to assess. Therefore interpretation of bladder cancer data must be approached with caution.

In the Oklahoma experience the male crude annual death rates over the fifteen-year period studied reflect a stable rate with a slight increase. The increase becomes evident when the rates of the three, five-year periods are compared. For the United States population, the death rates have been stable while the incidence rates have shown a rapid rise. As far as the Oklahoma female experience is concerned the crude annual death

rates have remained stable in contrast to the U. S. decline in mortality.

Age-specific death rates for the white and nonwhite populations show a risk that appears after age 35 years, and increases exponentially with age. This risk may reflect a cumulative environmental hazard expressed in the older population which seems to affect males with greater frequency than females as indicated by the age-sex-race specific death rates. This type of age-sex differential is consistent with an occupational or industrial hazard as the primary

Table 3

Mean Average Annual Age-adjusted Death Rates by Sex of White Population and Degree of Urbanization for Oklahoma Counties, 1956-65

Cancer Site		Degree of Urbanization			Kruskall-Wallis Test
		Metro-politan	Non metro-politan	Rural	
	Sex	Mean	Mean	Mean	
Bladder Cancer	Male	6.6	4.8	4.0	15.24 xxx
	Female	2.4	2.1	2.2	6.36 x

Chi-Square Values xxx $p < 0.001$
x $p < 0.05$

risk factor operating in the etiology of bladder cancer.

Another feature of the epidemiology of bladder cancer that appears in the Oklahoma data as well as the U. S. data is the fact that the mortality risk (age-specific death rates) is higher for nonwhite than for whites among the younger persons, but the reverse is true for older persons. However, the overall age-adjusted death rates are higher for white than nonwhite males, but are about the same for the females, both whites and nonwhites. The Oklahoma nonwhite population is unique in that it constitutes two distinct racial groups; the Negro population which makes up 6.6% of the total state population and the Indian population which is less than 3%. However, nonwhite bladder cancer deaths reflect primarily the experience of the black population as the Indian population is under-represented in the mortality experience. This is not unusual, as the Indian population is reported to have experienced reduced mortality from many other cancer sites and hence may reflect more the experience of oriental countries than western countries.

The high male-female sex ratios for bladder cancer in Oklahoma among the white population is consistent with the findings reported elsewhere. If the evidence already reported on the association of tobacco with increase in bladder cancer deaths continues to mount, this 2:1 sex ratio perhaps will increase in the future to approximate that for lung cancer. Considering that occupational hazards implicated in the etiology of bladder cancer continue to be reduced, the influence of other factors such as cigarette smoking and air pollution becomes clearer to delineate.

The geographic distribution of bladder cancer by county in Oklahoma has been expressed by standard mortality ratios. Outstanding among these ratios is the high SMR in Woods county (403), Coal (310), Pawnee (283), Delaware (224), Logan (219), Noble (203), and Pushmataha (200), three of which cluster in one geographic area. All of these counties have experienced mortality during the last fifteen years that exceeded the expected by at least 100%.

Since the Kendall rank correlation coefficient for white male and female death rates by county was very low and not significant, an unusual environmental hazard distributed in the state is unlikely to be affecting the geographic distribution of bladder cancer in Oklahoma. However, the highly significant urban-rural differences in mortality in Oklahoma for the males suggest a possible industrial hazard concentrated in urban communities as the primary risk factor in Oklahoma. More refined quantitative studies are needed to specifically delineate such risk factors.

SUMMARY

Deaths from urinary bladder cancer occurring to residents of Oklahoma from 1956-1970 were analyzed. Age-specific death rates and age-adjusted rates were tabulated for three, five-year periods by sex and race. A standard mortality ratio as well as an average, annual, age-adjusted death rate by county were tabulated and plotted on Oklahoma maps.

An increase was reported in the annual death rate for the males over the fifteen year-period, while there was no increase for the female rates. Twice as many deaths occurred among the males as the females in both actual deaths and in the death rates. Almost all bladder cancer deaths occurred in the 35 years of age and over group. There was also an increase in the average, annual, age-adjusted death rates by sex and degree of urbanization for Oklahoma counties. This increase was highly significant for males and seems to suggest an industrial hazard operating in urban communities to be influencing the mortality from the disease in Oklahoma.

The geographic distribution of the disease by county delineated several counties with elevated mortality and which need further studies. Another significant finding was the low mortality experienced by the Indian population of Oklahoma. □

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Pulmonary Penicilliosis: A Case Presentation and A Review of the Literature

GERRY L. MADDUX, MD
JOHN A. MOHR, MD
HAROLD G. MUCHMORE, MD

Saprophytic "non-pathogenic" fungi are not infrequently cultured from patients with pulmonary disease. These organisms are usually discarded as contaminants when in fact they may be the cause of serious disease.

INTRODUCTION

THE SAPROPHYTIC, nonpathogenic fungi are cultured not infrequently from sputum and/or tracheobronchial washings from patients with chronic cavitary pulmonary disease and those with neoplastic diseases. Many times the organism is regarded as either a laboratory contaminant or as a harmless, transient resident of the pulmonary destructive focus. However, in very rare cases, and for dubious reasons generally, these infections that have been regarded with so much disrespect may spread rampantly with the virulence of the most destructive pathogens. The mode and extent of dissemination is not predictable

and the infection may vary from a single chronic pulmonary focus to fungemias and mycetomas. Most of the severe mycotic infections involving the saprophytic fungi have been those of *Aspergillus sp.*, *Phycomycetes* and *Candida sp.* The incidence of *Penicillium* infection has not been considered alarming and this organism is almost routinely regarded as a contaminant when isolated from sputum.

It is the purpose of this paper to present a case of penicilliosis following the treatment of pulmonary histoplasmosis and to present a review of the literature. We would like to submit the idea that the so-called "nonpathogenic fungi" may play a very important role in the overall destructive process in cavitary pulmonary disease.

CASE REPORT

This 56-year old Caucasian male, retired carpenter, was admitted to the Oklahoma City Veterans Administration Hospital five times in the last six years. His admissions are listed in chronologic order with pertinent history, physical findings and laboratory data.

First Admission (10/13/65 - 10/29/65):

The patient was admitted for evaluation of complaints of generalized weakness, malaise, anorexia, night sweats and 28-pound weight loss over the past eight months. He had experienced progressive dyspnea to the point of dyspnea with mild exertion and he

From the University of Oklahoma Health Sciences Center, 800 N. E. 13th Street, Oklahoma City, Oklahoma 73104 and the Veterans Administration Hospital, 921 N. E. 13th Street, Oklahoma City, Oklahoma 73104.

was forced to relinquish his job because of weakness. He also complained of a cough, productive of two - three tablespoons of yellow-green sputum per day for the preceding two months but denied hemoptysis or chest pain. The patient had a smoking history of 30-pack years.

Physical examination revealed a well-developed, well-nourished, thin white male in no apparent distress. Vital signs were as follows: blood pressure 160/80 mm Hg, pulse 100/min. and regular, oral temperature 36.9 degrees Centigrade and respiratory rate 14/min. Pertinent physical findings included an increased anterior/posterior diameter of the chest with moderate use of the accessory muscles of respiration. The lung fields were hyperresonant to percussion and tactile fremitus and respiratory sounds were diminished bilaterally. There were no rales or rhonchi.

The chest roentgenograms showed moderate bilateral fibronodular changes in the upper lobes with calcifications in both hilar areas. Histoplasmin and purified protein derivative (PPD) skin tests were positive and the coccidioidin test was negative. Numerous sputum cultures yielded no growth of acid-fast bacilli or fungi. Fungal serology was negative. The patient was released without a diagnosis and on no therapy and was to be seen as an outpatient in the chest clinic. Second Admission (11/5/65 - 11/20/65) :

The patient was admitted for cholecystectomy. His chest x-ray revealed no changes and a sputum series was negative.

Third Admission (2/20/67 - 3/4/67) :

The patient was readmitted for evaluation of continued weakness and inability to gain weight. His sputum production had increased to two cups of white sputum per day. He denied night sweats, hemoptysis, chills, fever and weight loss.

Physical findings were unchanged except for scattered rhonchi throughout both bases and moist inspiratory rales at the left base. A chest x-ray revealed bilateral apical infiltrates and laminography showed early cavitation of these lesions. Extensive sputum studies were negative for acid-fast bacilli and fungi. The histoplasma hemagglutination titer was 1:32 and all other serologic and cytologic studies were negative. The

patient was again discharged without therapy.

Fourth Admission (2/28/68 - 7/19/68) :

The patient was admitted for evaluation of persistent bilateral apical infiltrates and numerous small cavitations—thought to be enlarging—in the apex. He denied any accentuation of symptoms and specifically denied hemoptysis, night sweats, chills, orthopnea and edema.

Physical examination revealed a poorly-nourished, white male who appeared chronically ill. Vital signs were normal. Additional pertinent findings included shotty anterior and posterior cervical lymph nodes, approximately four - six centimeters in size. There was a grade III/IV, blowing, systolic murmur heard over the cardiac apex. There was mild clubbing of the digits.

A chest roentgenogram showed bilateral, apical, fibrotic infiltrates with multiple cavities in the left upper lobe. Laminography confirmed the presence of a 3 X 6 centimeter cavity. The histoplasma hemagglutination titer was 1:64; other fungal titers were negative. Both histoplasmin and PPD skin tests remained positive. *Histoplasma capsulatum*

When work was done on this paper, Gerry L. Maddoux, MD, was a fourth year medical student serving as an infectious disease trainee. Doctor Maddoux is presently serving his internship at the University of Colorado School of Medicine.

John A. Mohr, MD, was graduated from the University of Oklahoma College of Medicine in 1964, where he is presently Assistant Professor of Medicine, Microbiology and Immunology. His medical affiliations include the American Federation for Clinical Research, the American Society for Microbiology, and the American Thoracic Society.

Harold G. Muchmore, MD, graduated from the University of Oklahoma College of Medicine in 1946 and has since been certified by the American Board of Internal Medicine. He is presently the Carl Puckett Professor of Pulmonary Disease at the school of his graduation. Among his medical affiliations are the American College of Physicians and the Royal Society of Health.

was cultured readily from sputum on 11 occasions and *Penicillium sp.* was grown eight times, twice alongside *H. capsulatum*. The patient received a course of 2350 milligrams of amphotericin B intravenously without untoward effects and showed considerable improvement. All fungal serologic studies were negative after this course of therapy and the patient was discharged.

During the following three years the patient continued to do well until approximately six months prior to the fifth admission when he developed a productive cough. The sputum was thick and yellow. Gram stains of sputum revealed septate hyphae and very few Gram positive cocci. The cultures were negative for acid-fast bacilli and *H. capsulatum*. During this period all cultures again grew *Penicillium sp.*

Fifth Admission (8/30/71 - 9/26/71)

The patient was admitted for re-evaluation. His physical findings were unchanged. He was moderately active and in very good spirits despite his copious production of sputum and frequent hemoptysis.

A chest x-ray showed fibronodular infiltrates with considerable bleb formation in both upper lobes. In the posteriolateral portion of the right upper lobe there was a large cavity with some surrounding infiltrate. Sputum cytologic and fungal serologic studies were negative. Fiberoptic bronchoscopy revealed a collapsed right middle lobe bronchus with atelectasis of the lateral division of the right middle lobe. The bronchoscopic aspirate was cultured and grew *Penicillium sp.* Twenty sputums were negative for acid fast bacilli and *H. capsulatum*, but *Penicillium sp.* was grown repeatedly.

Even though tissue section cultures were not possible in this case the fact that bronchoscopic aspirate from the involved area and repeated sputum cultures yielded *Penicillium sp.*, it was diagnosed as pulmonary penicilliosis. It was postulated that the infection was established in the chronic destructive process of histoplasmosis and gained a firm foothold when the histoplasma organism was eradicated. The patient was treated with tolerance levels of potassium iodide. Since the initiation of potassium iodide therapy (three months) not only has

the hemoptysis and sputum production essentially stopped but the fibronodular infiltrate, especially surrounding the cavity, has improved. Sputum cultures have remained negative for acid fast bacilli and fungi.

DISCUSSION

Penicillium sp. has been implicated as the causative organism in a wide variety of infections. Many of these have occurred in otherwise healthy individuals with no signs of immunologic deficiency. Specifically, penicillium has been implicated in erysipelas,¹ bronchial asthma,² urinary tract infections³ and superficial infections of hair, skin and nails.³ Penicillium, along with many other saprophytic fungi, has been responsible for several reported cases of ear infections. Polyanskiy⁴ was the first to report a case of this type; a temporal lobe penicillium abscess complicating otitis media. A case of otitis externa with the same organism was reported the following year.⁵ Smyth⁶ examined 282 patients with chronically infected, postoperative mastoid cavities who were resistant to conventional therapy. He was able to diagnose saprophytic fungal infection in 26%. Two of these patients were found to be infected with *Penicillium sp.* Morriss and Spock⁷ recently reported fatal mycotic infection of the maxillary and ethmoid sinuses, orbit and cerebral arteries with Penicillium following the extraction of a deciduous tooth in an 11-year old boy. The invasive process spread rapidly despite vigorous amphotericin B therapy.

In addition to various infectious processes, Penicillium has been implicated in other pathologic conditions. Airborne molds, including Penicillium, have been considered among the most important inhalent allergens in cases of respiratory allergy.⁸ It has also been proposed as a causal factor by several authors^{9, 10} in cases of atopic dermatitis.

By far the greatest number of reported Penicillium infections are bronchopulmonary in nature. At least 11, culture proven, clinical cases^{6, 11-20} of such infections are described in the literature. It has been postulated^{21, 22, 23} that the incidence of secondary mycotic infections has increased since the use of antibiotics, antimetabolites and ste-

roids in cancer patients. However, of the bronchopulmonary cases reported, eight were reported before the antibiotic era and five patients had no underlying disease.^{5, 12, 13, 15-20} The clinical symptoms in these patients consisted of cough, expectoration, hemoptysis and weight loss. The radiologic features may be either those of focal pneumonitis or cavitation. The clinical findings are compatible with pulmonary tuberculosis or aspergillosis and a definite clinical diagnosis cannot be made without cultures and identification of the organism.

Therapy of pulmonary penicilliosis is not well standardized as such infections rarely present a problem and are rarely recognized as such. Oral potassium iodide has been used with favorable results.¹¹ In one reported case,¹⁴ the use of cortisone and potassium iodide resulted in remarkable amelioration of symptoms. However, the patient later developed a fungemia and a mycetoma. These complications were presumably associated with the use of steroids. The patient presented here has clinically improved on the present therapy. □

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VACCINATION AGAINST SMALLPOX

The last documented case of smallpox in the United States occurred in 1949. Since the probability of contracting smallpox in the United States today is extremely low, and continues to decrease, the Public Health Service recently acted to remove vaccination against smallpox from the list of routinely recommended immunization procedures. This decision was based not only upon the low risk of contracting smallpox in the U.S., but also upon unnecessary exposure to the risk of complications that accompanies routine or non-selective vaccination.

Almost completely ignored in the furor following the new PHS ruling, is that routine vaccination against smallpox is still recommended for *all* travelers to and from countries where smallpox is endemic, and for *all* health services personnel who come into contact with patients. It is well established that hospitals are the chief site of smallpox transmission within non-endemic countries. A recent analysis of 40 smallpox introductions into smallpox-free countries showed that 319 of 610 secondary cases (51.5%)



News From The Oklahoma State Department of Health

were hospital acquired. These included 32 physicians, 41 nurses, and 50 other hospital personnel in several categories.

A recent survey of a sample of Oklahoma hospitals revealed that not one was adequately protected in terms of vaccination levels against smallpox among staff and employees. Interestingly, a recent discussion among physicians and health scientists at the University of Oklahoma Health Sciences Center concerning the advisability of the recent Public Health Service ruling on smallpox vaccination, terminated when it was pointed out that over 25% of the group present was not adequately protected against smallpox.

The State Department of Health provides consultation and direct vaccination assistance to hospitals desiring to increase the level of vaccination against smallpox among their employees. □

COMMUNICABLE DISEASES IN OKLAHOMA FOR AUGUST, 1972

Disease	August 1972	August 1971	July 1972	Total to Date	
				1972	1971
Amebiasis	1	3	2	20	41
Brucellosis	2	—	—	6	3
Chickenpox	7	3	2	140	187
Encephalitis, infect.	3	48	3	10	24
Gonorrhea	994	642	945	6908	480
Hepatitis, infect. & serum	63	94	58	523	524
Leptospirosis	—	—	—	1	1
Malaria	1	1	1	4	62
Meningococcal infections	—	—	—	6	5
Meningitis, aseptic	7	4	8	22	71
Mumps	3	1	1	150	191
Rabies in animals	20	8	21	238	244
Rheumatic fever	—	1	3	23	18
Rocky Mt. spotted fever	8	2	5	28	25
Rubella	—	3	1	34	63
Rubella, congenital syn.	—	—	—	—	—
Rubeola	1	2	—	9	789
Salmonellosis	10	15	—	88	130
Shigellosis	33	11	24	93	51
Syphilis	115	105	85	794	845
Tetanus	—	—	1	1	1
Tuberculosis, new active	35	37	53	248	226
Tularemia	—	2	3	8	14
Typhoid fever	1	—	—	2	2
Whooping cough	4	—	6	22	16

VD Control Project Underway Statewide

Oklahoma's Venereal Disease Control Project, funded through the State Department of Health, began operation on July 1st. One of the projects's first activities will be the establishment of a statewide screening of patients for Gonorrhea and Syphilis through existing family planning clinics.

Other VD screening programs will be carried out in local health departments and in special free VD clinics which will be established in high incidence areas. Presently the administrative personnel of the project are making available appropriate materials for a VD detection set-up, including a continuous screening program. The project provides for Gonorrhea cultures, incubators and other needed equipment. Technical support will be supplied by the State Health Department's laboratory system.

A field staff will be established for epidemiological control of the major venereal diseases. The men will be stationed in metropolitan Oklahoma City, Tulsa, and other population centers in the state. They will interview diagnosed VD patients for their sexual contacts and attempt to locate those persons for medical diagnosis and necessary treatment.

Director of the project, Robert Mills, explained, "Screening and epidemiological control of VD are two of our major project functions. Another portion of the project includes a public awareness campaign and health education program for the public as well as physicians and health related professionals."

He went on to point out that the latest information for venereal disease detection and treatment will be made available to all physicians. The public awareness program will utilize the mass media for a number

of purposes:

1. To accustom the public to the mention of venereal disease in the media, 2. To make the public aware that there is a VD problem of epidemic proportions, showing its wide scope, 3. To make the public cognizant of Gonorrhea and Syphilis symptoms, 4. Prevention methods available, 5. Locations of treatment clinics and other sources of available medical care.

One of the projects first awareness functions was the establishment and staffing of an information booth at the State Fair of Oklahoma. The booth utilized a multi-media display combined with a staff of Operation Venus volunteers and VD personnel to give information to fair visitors. The booth was co-sponsored by the Oklahoma Pharmaceutical Association.

A series of seminars has been scheduled for school counselors, school nurses and other interested personnel in the major metropolitan Oklahoma City School Systems on the subject of VD Education. The seminars will make VD information available through films, presentations, discussions and a talk by teen volunteers from last year's successful "Operation Venus."

Other plans include a VD Seminar for physicians and similar seminars for other health related professions. □

Russian Cancer Drugs To Be Tested in U.S.

In a joint cooperative effort aimed at health research projects, three experimental cancer drugs developed in the Soviet Union will be given trials of effectiveness on American patients starting early next year.

HEW Secretary Elliott L. Richard-

son, underscoring his attitude of caution about the prospective benefits of the drugs, said that they were new and had not been widely tested.

The drugs, which have not been used clinically in the United States, are: Fluorodopan, which Soviet scientists have used for treating lymphomas, cancers of soft tissues; Diiodobenzotepa, a drug the Russians have used for treating cancers of the thyroid and bladder; and, Asaley, which Russian doctors have used in the treatment of over 200 cases of lymphoma, breast and ovarian cancer.

In return the United States is sending the Soviet Union three experimental drugs: Hexamethylmelamine which has been tried against lung cancer; CCNU, an agent that has been used for a variety of types of cancer; and DTIE, which has been used against a type of skin cancer called Melanoma.

The patents to all six of the drugs are owned by the respective governments.

The new mood of scientific cooperation between the two governments began when ground work was laid by President Nixon and Soviet leaders at the Moscow Summit meeting. The joint health research project will include viral diseases, provision of health services, and occupational health. Cooperation in the studying of cancer, heart disease and environmental problems resulted from a broadening of the original agreement.

Soviet Health Minister Boris V. Petrovsky, in a joint statement with Doctor Roger O. Egeberg of HEW, said, "All manner of obstacles are being removed and a very solid foundation built for cooperation between the two countries." He went on to say that the Russians are currently studying a suggestion from President Nixon that arthritis be added to the joint research program. □

McC Campbell Names Councils and Committees

Stanley R. McC Campbell, MD, President of the Oklahoma State Medical Association, has announced a list of his appointments to the OSMA Councils and Committees.

Standing committees and councils are es-

tablished in the OSMA Bylaws, while special committees are designated by the President to carry out specific functions under the jurisdiction of appropriate councils.

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Family Physician Making A Comeback

If an informal survey of 12 medical schools across the country is correct, there is an increasing number of medical students considering the practice of family medicine as a specialty. The survey was conducted by the AMA and reported in the American Medical News.

Increasing concern of medical students about humanitarian issues and new programs devoted to family health in many of the country's medical schools are two of the reasons given for the current upsurge of interest.

The survey showed that one of the greatest areas of medical student interest in family medicine appeared to be at the University of Washington School of Medicine in Seattle. According to Theodore J. Phillips, MD, Chairman of the Department of Family Medicine, "About 45 percent of the students have expressed a

definite interest in this area." Other medical schools around the country reported increased interest, but to a lesser degree.

To add impetus to the increased interest, Congress is being encouraged to implement proposals made in 1970 by an ad hoc committee on education of family practice which included representatives from the American Academy of General Practice (now the American Academy of Family Physicians) and the Association of American Medical Colleges, as well as from the AMA Council on Medical Education and the AMA Section on General Practice.

The committee's major recommendations to Congress were:

"Immediate major efforts to encourage the development of new programs to provide large numbers of family physicians. It was urged that these programs cover all levels

of medical education—from pre-medical training through continuing education.

"Development by medical schools and teaching hospitals of family practice models, in cooperation with practicing physicians.

"Development of new sources of financial support for family practice teaching programs.

"Recognition and status for family practice equivalent to other medical specialties, including an appropriate system of specialty certification.

"Integration of the internship and residency, with evaluation for accreditation by one body, rather than two.

"Careful attention to factors to make the environment for family practice more favorable and provide an incentive to medical students and young physicians to enter the field." □

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The Pill Versus Sterilization in Government Study

Sterilization became the most popular form of birth control for couples over age 30 during the last half of the 1960s, but younger couples still prefer "The Pill," according to a recent government study.

The 1970 National Fertility Study, conducted under contract with the National Institutes of Health Center for Population Research, also provided fresh evidence of increased use of contraceptive devices was "a major factor in the drop in the nation's birth rate," which now is at an all time low.

Although nearly six million married women were using oral contraceptives in 1970, "one of the most dramatic findings," was that voluntary sterilization was preferred more often than "The Pill" by both black and white couples in which the wife was aged 30-44.

"The jump in reliance on surgical procedures, and the fact that contraceptive sterilization had by 1970 become the most popular method among older couples, appears to reflect the unsuitability of other methods of contraception for many couples who have already had all the children they want to have," said the first published report from the study.

The first report was written by Charles F. Westoff of Princeton University, former Executive Director of the Commission on Population Growth and the American Future. He said, "It is estimated that as of 1970, some 2.75 million couples of reproductive age (15-44), and undoubtedly many more since 1970, had resorted to sterilization, which is usually regarded as an extreme solution to the problem of fertility control."

Sterilization was more common among older black couples using contraceptives than among older white couples, he said, but the black male was far less likely to have been sterilized than the black female or either of the white marriage partners.

The report, based on nationwide interviews with 5,884 married wom-

en under age 45 and compared with the 1965 fertility study, said there was little change in the overall proportion of couples using contraception but significant changes in the methods used.

Sharp increases were reported in the use of "The Pill" which remained the most popular contraceptive, sterilization and the intra-uterine device, but a decline in use of condoms, diaphragms, the rhythm method, withdrawal and douche.

Westoff concluded, "The adoption of the pill by American women has been an amazing phenomena, considering the various side affects associated with its use and is an indication of the wide market for effective contraception." □

Proposed FDA Rules Raise Malpractice Questions

A potentially serious medico-legal question is aggravated with the announcement by FDA of regulations governing the prescribing of drugs for conditions, or in dosages, not officially sanctioned by the government.

The regulations, proposed August 15th, are open to comment from interested physicians and others until October 2nd, after which FDA will make the regulations final.

The preamble to the draft rules acknowledges that Congress does not want FDA to "interfere with medical practice," and that the physician *may* deviate from the package stuff-er without FDA's approval; but the draft goes on to say that "it is sometimes in the best interest of the physician and the public that the FDA's approval be sought in view of the scientific principles and moral and ethical considerations involved."

Pointedly, the regulations note that Congress "recognized a patient's right to seek civil damages in the courts if there should be evidence of malpractice, and (therefore) declined to provide any legislative restrictions upon the medical profession." It is difficult to avoid concluding from those statements that FDA contends that prescribing out-

side the government-approved parameter might be equated with medical malpractice.

Similarly, the preamble equivocates on the implications of the package stuffer as a legal document, first stating that it "is not intended either to preclude the physician from using his best judgment in the interest of the patient, or to impose liability if he does not follow the package insert." However, the proposal continues, "a physician should recognize that the package insert represents a summary of the important information on the conditions under which the drug has been shown to be safe and effective by adequate scientific data submitted to the FDA."

The preamble may seem equivocal, but toward the end of the proposal, where FDA offers a new draft regulation, the agency's views become clearer. When the government determines that an approved drug is being used in a manner which it does not approve, FDA proposes to give itself the following options, among others, it may:

1. Limit the distribution of the drug to use "only by physicians with specified qualifications."

2. Restrict the drug's distribution to specified places, e.g., hospital pharmacies, and/or limit prescribing rights to physicians with particular qualifications.

3. Prohibit any refills of the prescription.

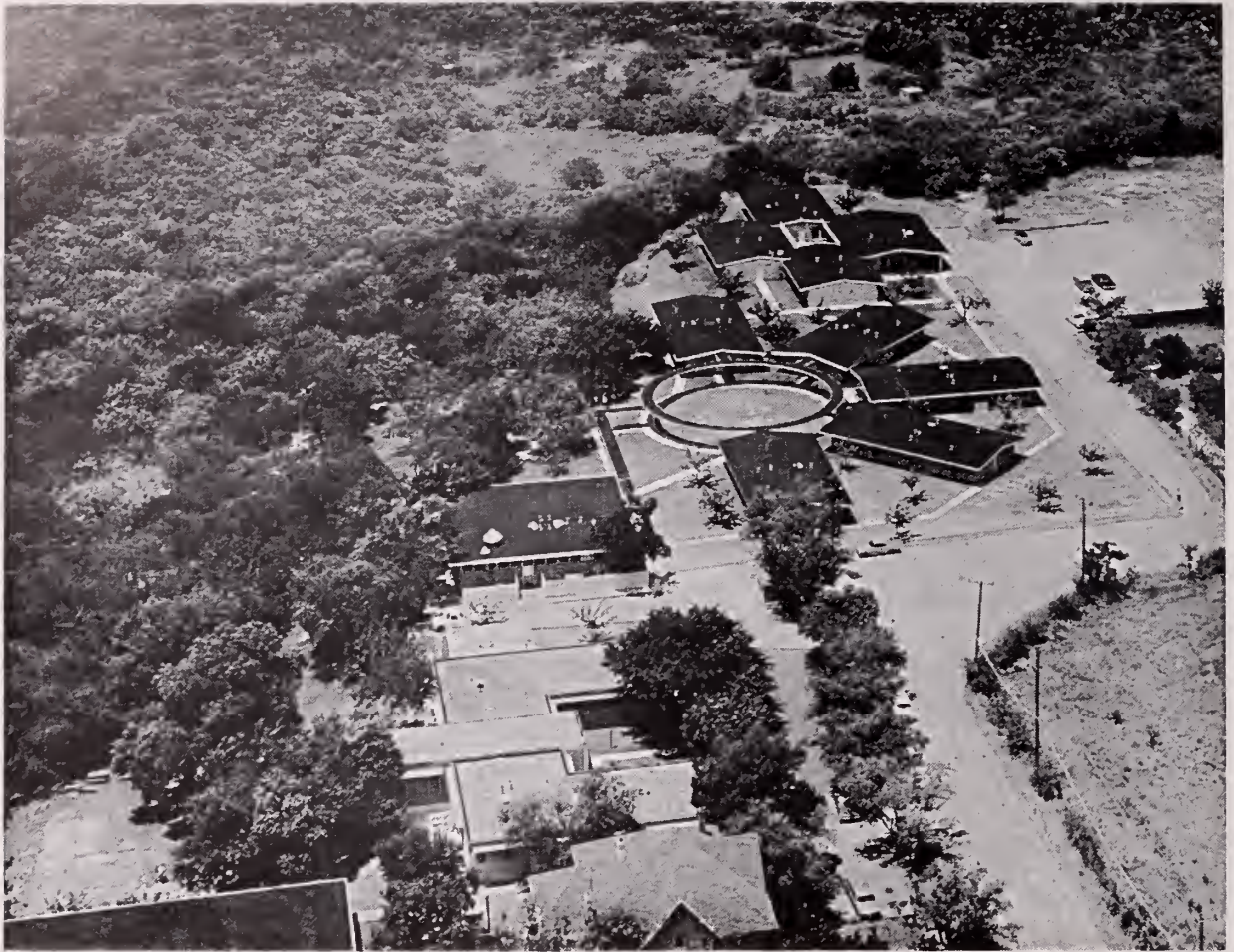
4. Require that the package insert be revised, adding a specific contraindication or warning against the unapproved use.

5. Require that a patient-oriented package insert be drawn up and given to the patient when the prescription is filled.

6. Require revision of the package insert adding the new indication, or require the manufacturer to conduct tests to determine the merit, if any, of an unapproved use.

7. Take the drug off the market.

Comments on the proposed regulations should be addressed to the Hearing Clerk, Department of Health, Education, and Welfare, Room 6-88, 5600 Fishers Lane, Rockville, Maryland 20852, and should be filed in quintuplicate. □



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HMO Study Backed by AMA

Whether or not the Health Maintenance Organization, known as an HMO, is the key to comprehensive medical care at reasonable cost is becoming an important question and its answer will greatly affect legislation on national health insurance.

Solid evidence about the effectiveness of HMOs is lacking, so the American Medical Association is supporting Congressional efforts to find out. In effect, the AMA would like to determine whether the HMO lives up to its backers' claims and if it has any harmful side affects.

A Social Security Administration report observes, "While the idea of savings is associated with prepayment plans, there are no definitive studies available which indicates whether such savings result from decreased services and less care, or from providing the needed care under less costly arrangements." In fact, a SSA study, unpublished until reported in an AMA publication, showed conflicting findings when it delved into the HMO cost question.

The study compared per capita Medicare payments for members of two Kaiser plan HMOs in California and the Health Insurance Plan of Greater New York, known as HIP, with payments to persons living in the same areas but not members of the three HMOs.

Cost per capita for Kaiser patients were 14.8 percent lower in Northern California, and 7.3 percent lower in Southern California than for non-Kaiser patients. But in New York, payments were 10.6 percent higher for HIP patients than for non-members.

This ambiguity is what troubles the AMA about administration requests to Congress for \$117 million in 1972 and 1973 to help launch another 600-plus HMOs, with a goal of 1,700 HMOs, handling 40,000,000 enrollees, by July of 1976.

An AMA spokesman said, "Before further legislation is considered we believe Congress needs to know what real improvements—if any—HMOs can provide in the quality,

quantity, and economics of health care."

While the AMA is opposed to the rapid expansion of the HMO programs, it is encouraging Congress to continue the financing of the 110 grants already announced by HEW. These projects would comprise an experimental base that could yield meaningful data.

The AMA spokesman said, "Another question the 110 HEW-approved HMO projects might answer: Will consumers accept this new kind of medical care? Some individuals perceive HMOs as impersonal, inconvenient, and requiring long waiting to get services, according to HEW. They also feel that there is a 'clinical' or even a 'charity' atmosphere in the health care clinics." □

1973 OSMA Annual Meeting Plans Underway

Plans for the 1973 Annual Meeting of the Oklahoma State Medical Association include not only the usual scientific program, but a ten-state regional meeting for obstetricians and gynecologists.

Annual meeting Chairman Stephen J. Adelson, MD, and Program Chairman John B. Nettles, MD, announced the meeting had been set for Thursday-Saturday, April 26th-28th, in Tulsa.

Obstetricians and gynecologists from the ten-state District VII area of the College of Obstetricians and Gynecologists will be invited to attend a special regional seminar to be held at the same time as the annual meeting in the Tulsa Assembly Center.

It has also been announced that for the first time in many years, the President of the American Medical Association will attend the OSMA Annual Meeting. Charles A. "Carl" Hoffman, MD, is tentatively slated to speak to the OSMA House of Delegates and to appear before an open meeting for all members.

Additional announcements about the association's 67th Annual Meeting will be made as plans are completed. □

Legal Consent To Medical Care May Be Given 18-Year Old

Recent changes in Oklahoma's state law now make it possible for an 18-year old to give legal consent for medical care without parental approval or consent.

In answer to a question posed by Don Blair, Executive Director of the OSMA, Roy C. Lytle, Association Legal Counsel, said, "... at the last session of the Legislature, Senate Bill 515 was passed. It amends (state law), and provides that minors are persons under 18-years of age. It, therefore, follows that everyone over 18-years of age is an adult, and any adult can give consent to medical or surgical procedures involving himself or herself."

In closing Lytle stated, "... for the purpose that you are interested in, a doctor is safe in assuming that an 18-year old is an adult for the purpose of giving consent to medical and surgical procedures involving his own person." □



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AMA Proposes Agency For Emergency Services

A new federal agency to direct the nation's efforts to improve handling of medical emergencies has been proposed by the American Medical Association. A recent JAMA editorial advocated formation of an Emergency Medical Services Administration within the Department of Health, Education and Welfare.

The AMA plan was first presented to the subcommittee on Public Health and Environment of the Interstate and Foreign Commerce Committee of the U.S. House of Representatives at a recent Washington hearing. It was originated by the AMA's Committee on Community Emergency Services and designed to assist communities to provide better care for victims of accidents and of medical emergencies such as heart attacks and strokes.

Under the program, state governors would submit plans for statewide improvement of emergency health care. In order to be eligible, communities would be required to formulate plans for "qualified emergency medical service systems" that would include the following minimum requirements:

- Well equipped emergency vehicles, staffed by emergency medical technicians trained and equipped to provide all necessary life support at the scene of an accident or illness and during transportation.

- A communications system that guarantees prompt response to emergency situations.

- Highly qualified emergency medical care facilities including staff and equipment at the hospital level.

- Training programs to reach large numbers of area residents such as medical self help.

- Adequate highway marking signs to locate emergency medical services.

- Emergency medical services adequate to meet the needs of the community or region.

- Periodic evaluation of the qual-

ity of emergency medical services.

- Registration of ambulance attendants through a national registry program.

The proposed program calls for \$450,000,000 to be spread over the first three years of operation. Most of the money would go to pick up 50 percent of the cost of community purchase of ambulances and the installation of emergency medical communications systems.

The federal director of the new agency would determine minimum requirements for emergency medical service equipment, licensure by states of ambulance service providers, and adequate communications and reporting systems.

He would also establish adequate levels of liability insurance for ambulance operators, and medical supervision of ambulance services including standards for training curricula. □

Junior College Offers Health Related Program

The new South Oklahoma City Junior College is offering two health related programs in its first year of operation. Both offerings lead to an associate degree plus a certificate of proficiency.

South Oklahoma City has joined other Oklahoma colleges in training allied health manpower. Its program in Occupational Therapy and Therapeutic Recreation is under the direction of Mary North, OTR. Its course in Emergency Medical Technology is being coordinated by Diane Denton, R.N.

Both of these health related programs were selected to prepare allied health workers needed to meet existing manpower shortages in the provision of statewide emergency services and therapeutic services for disabled individuals.

Several physician members of the OSMA from the Oklahoma City area have participated in advising the new junior college and others have been called upon to assist in program development.

The new junior college is located at 2700 S. May Avenue in Oklahoma City. □

New Disclosure Regulations Proposed by HEW

On September 2nd, HEW Secretary Elliott L. Richardson, announced the publication of proposed regulation governing the disclosure of certain reports and records within the Medicare program. The proposed regulations provide for the publication of the name of any provider of services, physician, or other person who has been found guilty by federal court of submitting false claims under Medicare.

The new regulations would not change the confidential nature of individual Medicare beneficiary records, the Secretary stressed. The prohibition against disclosure in the Social Security Act protects the confidentiality of all Social Security records except where disclosure is provided for by regulations.

Among the records to be made available would be survey reports of hospitals, extended care facilities, home health agencies, and independent laboratories, repaired for the Medicare program by state health agencies.

Since these reports may contain findings of deficiencies that could affect the health and safety of patients, the institution's comments on the findings and information as to corrective actions taken would also be provided along with the reports.

According to the new regulations information about a particular institution would be available on request at the Social Security office serving the area in which the health facility was located. However, information identifying individual patients, physicians, or other practitioners would be deleted before the reports were disclosed.

In addition to disclosing information about physicians who had been found guilty by a federal court of submitting false claims, similar disclosures will be made of the names of those found by a Medicare carrier, following appropriate professional consultation, to have engaged in a pattern of furnishing services or supplies in excess of the medical needs of patients. □

Health Department Issues Syringe Plea

A plea for physicians, hospitals, and clinics to be extra careful in the disposal of needles and syringes has been issued by the Oklahoma Health Department in its Communicable Disease Bulletin.

The bulletin reported that recently, "a high school student was found to have in his possession numerous disposable needles and syringes. Presumably, he intended to use them for taking unauthorized parenteral drugs. He claimed that he found the needles and syringes at a local dump."

The bulletin pointed out that health care facilities could help discourage drug abuse by adequately disposing of used needles so that they would not fall into the hands of youngsters.

Needles should be broken at the hub and syringes should be rendered useless if possible. Small devices called needle clippers perform both functions and can be conveniently placed at nursing stations or in treatment rooms. Needle clippers are available at local surgical supply houses.

A sanitary landfill, according to the Bulletin, is probably the most ideal place for final disposal. □

Court Decision Could Ban Hundreds of Drugs

A recent federal court decision could result in the removal from the market of scores—perhaps hundreds—of drugs of significant value to prescribers and the public. In a suit being conducted by the American Public Health Association and the National Council of Senior Citizens, the FDA was castigated by a federal judge for "intolerable procrastination."

The suit, started in 1970, demanded that the Food and Drug Administration remove pharmaceutical products put on the market prior to 1962 unless they have been proven effective in clinical trials acceptable by 1972 standards. The National Academy of Science/National Re-

Death

IRVING G. HAMBURGER, MD
1927-1972

Irvin G. Hamburger, MD, Oklahoma City anesthesiologist, died September 17th, 1972. A native of Weatherford, Oklahoma, Doctor Hamburger was graduated from the University of Oklahoma College of Medicine in 1954. Following his residency Doctor Hamburger became Associate Professor of Anesthesiology at the school of his graduation. He was a member of the Oklahoma County Anesthesia Society.

search Council review of most 1938-1962 products found that most of them had not been subjected to the sophisticated testing now current, and therefore rated most of them either "probably effective" or "possibly effective," on the basis of the available studies and the panelists opinion.

FDA, following receipt and study of the NAS reports, had permitted manufacturers to either cease the marketing of such drugs, eliminate or amend claims that had been judged questionable, or begin additional tests designed to establish the previously inadequately-documented claims.

In deciding in favor of the plaintiffs, District of Columbia Federal Judge Bryant castigated FDA for "intolerable procrastination" in processing the NAS/NRC reports, and for what he considers evidence of "solicitude" for the drug manufacturers.

The effect of the court decision could be to summarily remove all such drugs from medical practice. Although there is a legal provision for public hearings before such drastic action, FDA has not granted a public hearing over the removal of a drug from the market in years.

In late September the final order from the judge had not been published. If it followed the judge's earlier decision it will be imperative that FDA appeal the decision. □

Aetna Issues Phase II Controls Letter

Aetna Life and Casualty Company, Medicare Carrier for Oklahoma, has issued a news letter on "Effect of Phase II Controls On Allowable Charges Under Medicare (Part B)." The information sheet reportedly

went to all Oklahoma physicians.

The information read as follows:

"Under present Social Security regulations, reasonable charges are updated annually to take into account the actual charges physicians and suppliers have billed for covered services in the immediately preceding calendar year. The revised reasonable charge levels go into effect on July 1st of each year or as soon thereafter as they can be incorporated into the carrier's payment system. Thus, for the 12-month period beginning July 1st, 1972, the reasonable charge levels will be calculated from actual charge levels for calendar year 1971.

"However, because of a ruling by the Price Commission, only 40% of these calculated increases in reasonable charge levels can be recognized for the 12-month period beginning July 1st, 1972.

"The ruling of the Price Commission is that the Medicare reasonable charges in effect on November 13th, 1971, must be considered as base prices for Phase II purposes, and that, as a result, they may not be increased by more than 2.5 percent in the aggregate during the fiscal year beginning July, 1972. Based on actual increases in Physician and supplier billings in calendar year 1971, the charges allowed under the Medicare program for the 12-month period beginning July 1st, 1972, would have been increased by about 6.2 percent in the aggregate. To implement the Price Commission's ruling, therefore, only 40 percent (2.5 is about 40% of 6.2) of the increases that would ordinarily have been allowed will be recognized in calculating reasonable charges for the fiscal year beginning July 1st, 1972.

"What does this Price Commis-

sion ruling do to a physician's reasonable charge for fiscal year 1973?

"If, for example, in 1970 a physician's customary charge for procedure X was \$8.00 and the prevailing charge was \$7.00, his reasonable charge would be \$7.00 for 1970.

"If, for the same procedure X this physician's customary charge was \$8.00 in 1971 and the prevailing charge was \$8.00, his reasonable charge would be \$8.00 for 1971.

"As a result of the Price Commission's ruling, only 40% of the \$1.00 increase (\$7.00 in 1970 to \$8.00 in 1971) would be allowed. For fiscal year 1973, the reasonable charge for this physician would be \$7.40.

"If a physician's reasonable charge for 1971 is equal to or less than his reasonable charge for 1970, no adjustment would be necessary for fiscal year 1973.

"If a physician lacked customary charge data in 1970 for a given item or service, his reasonable charge was based on the prevailing. For fiscal year 1973, the 1971 reasonable charge must be compared to this 1970 prevailing charge. Where the 1971 reasonable charge is higher, then only 40% of the increase would be allowed." □

Diabetes, Drugs, and Cardiac Revascularization Highlight Conference

Three half-day, in depth, programs will highlight the 42nd Annual Fall Conference of the Oklahoma City Clinical Society when it meets October 23-25.

Set for Oklahoma City's Skirvin Hotel, the three-day conference will be acceptable for 15 hours of credit, category 1, from the American Academy of Family Physicians.

Beginning Monday, October 23rd, with a half day session on Cardiac Revascularization, the conference will follow with two other half day programs: Diabetes—The Old, The Young, The Pregnant, will be featured on Tuesday, October 24th and Wednesday's Program will be Drugs—Use, Abuse, Misuse.

In all nearly 25 separate scientific

presentations will be made during the three days.

Entertainment during the conference will include free buffet breakfasts served each morning from 7:00 a.m. until 7:45 a.m. The purpose is to meet and mingle with no formal presentations. Free lunch snacks will be served each day in the exhibit area.

Social highlight of the 42nd meeting will be Tuesday evening at Oklahoma's Cowboy Hall of Fame when the society will honor guest speakers and their wives at a banquet. Cocktails will be served on the veranda at 7:00 p.m. with dinner at 8:00 p.m. in the Great Hall. With the banquet being held in such a beautiful and unique setting, it will be an opportunity to visit the art galleries following cocktails before the dinner.

Speaker at the banquet will be David L. Schmidt, a nationally known after dinner speaker and entertainer. Mr. Schmidt has been the keynote speaker at the last three national conventions of Toastmasters International and will talk on the subject of "Marshmallows, Gold Stamps or Brown Stamps?". Dinner music will be furnished by strolling troubadours. The dress for the evening will be formal western, suits or dinner jackets for men, and after five for the ladies. □

Doctor Needs Duck Stamp Help

Every now and then the OSMA receives a request for help from one of its members. Harris D. Riley, Jr., MD, has come up with the most unusual request we have had in a while.

We have many members who are avid duck hunters, but Doctor Harris Riley is an avid duck stamp hunter.

The doctor is in the process of completing a collection of U. S. Duck Stamps. The best place to find them is from duck hunters who have retained their duck stamps from past years.

While looking for any duck stamp from the years 1934 through the present, he specifically needs stamps

from 1953, 1954, 1958, 1959, 1967, 1968, 1969, and 1970. However "all others are welcome."

For those unfamiliar with duck stamps, one which states "void after June 30, 1958" is regarded as a 1957 stamp . . . or whatever year is previous to the one printed on the stamp.

If you can help Doctor Riley, he can be reached at the Department of Pediatrics, Children's Memorial Hospital, P. O. Box 23901, Oklahoma City, Oklahoma 73190.

Incidentally, if any other physician has an unusual hobby and needs some help from their colleagues, they should contact the OSMA Executive Office. □

Government Concentrates On Flu Vaccine

While government scientists have given up on the possibility of developing a cold vaccine, due to the large number of viruses that can cause the illness, they have developed a new kind of flu vaccine containing live viruses that they believe holds hope of greatly containing future influenza epidemics.

While the new flu vaccine still must be put through extensive tests and trials before it can be licensed for use on the public, scientists are hopeful that this can be done before the next major expected U. S. flu epidemic in the latter part of the decade.

In their research at the National Institute of Allergy and Infectious Diseases of the National Institutes of Health in Bethesda, Maryland, the scientists say they employed the live, the weakened, viruses in developing the vaccine.

A complicated laboratory trick enabled the scientists to produce an immunity to the flu with live viruses without causing the disease itself. The trick involved creating a high-bred virus that cannot stand the heat of the lungs, where it could bring about the disease. This high-bred, however, thrives in the lower temperatures of the nose and throat, where it produces protection against the flu.

The new vaccine was given as a nasal spray instead of an injection

and none of the 17 persons given the new type vaccine in tests caught the influenza even when exposed to it. But 17 of 28 not given the vaccine did catch influenza.

None of the 17 experimental patients suffered any of the side affects associated with presently used killed virus vaccine—wooziness, headache, a low fever and slight nausea. ☐

editorial

(Continued from Page 397)

to: "Did you vote regularly when you were free?"

Gambling syndicate underling (age 33, serving 5-10 years): "The organization always saw to it that I voted; even told me who and what to vote for."

Alcoholic (age 47, doing 1-2 for non-support): "They'd let me off work in time to make it to the polls, all right. But I'd stop at a buddy's house to talk the election over. There'd be bottle or two around. And somehow, before I considered all the issues and candidates and decided who'd get my vote, it was either too late or I was too loaded to care anymore."

Sex offender (age 39, serving 1½-10 years): "I never voted except in presidential elections. I voted for Dick because my name is Nixon, too." (Wouldn't it be interesting to know how many other votes are cast for similar, lackadaisical reasons?)

As for me—well, occasionally it is unpleasant to face the mirror of patriotism. Instead of voting I have gone hunting and fishing; attended to personal matters of assorted kinds. But the future will offer opportunities to prove my determination never again to skip a chance to vote. And I will vote as intelligently as I can.

In the meantime, what about you?

Like many other sheer blessings in our full-fashioned freedom, the privilege of voting just can't completely be appreciated until it is lost. I know. So I must agree with the immigrant who said: "Most Americans can't adequately appreciate their system of government because they don't understand what it ain't."

However, our Star Spangled Banner waves best when every thread

is intact. Similarly, the government it represents needs every vote.

But nobody votes in my town. Nobody may.

Miscellaneous Advertisements

LIKE NEW EQUIPMENT FOR SALE. Electrocardiograph — Marquette 12 channel, direct writing, series 2,000, automatic electrocardiograph (model C-207) with extra length patient cable. Complete with all accessories, EKG bags and paper, electrode paste, instruction manuals, etc. Telecommunication compatible with basic circuitry already installed. Tonometer — Automatic applanation tonometer (Berkeley Tonometer Company—Mackay-Marg Recorder Amplifier). Precision tonometry without need for corneal anesthesia. Complete with all accessories and supplies. Portable. Vision Tester—Titmus Model OV-7M with industrial targets (interchangeable). Complete with manuals and supplies. Portable. Audiometer—EB Model 350 MB. All transistor. Portable. Complete with earphones, special sight shield, manual and supplies. Other—Healthometer Scales by Continental (includes patient support and height scales). Tycos Syphgmomanometer. Littmann Stethoscope. Located in Oklahoma City. Contact Key A, The Journal, Oklahoma State Medical Association, 601 N.W. Expressway, Oklahoma City 73118.

PHYSICIANS WANTED. Planning to build multi-suite Professional Mall in Weatherford, Oklahoma, a friendly fast growing college city; will build to suit. Need Two MDs. Write T. J. Toma, DDS, Box 310, Weatherford 73096.

EXCELLENT GENERAL PRACTICE OPPORTUNITY in community of 6,000 population needs several additional physicians (only two MD's in city). Physician owner retired. Nearly new clinic for sale, trade, or lease; includes laboratory, x-ray, physio-therapy, pharmacy, and necessary space to accommodate two physicians. Contact Russell W. Lewis, MD, 1901 West Broadway, Sulphur, Oklahoma 73086.

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AN UNUSUAL OPPORTUNITY for general practitioner or internist who is interested in allergy. Associate desired by allergist with a thriving and growing practice who is nearing retirement age. Young allergist would also be considered. Large office with well-trained staff. Salary negotiable with expectancy of incorporating and privilege of selecting a second physician to be associated with him. Will pay for periodic post-graduate courses. Location — South Central U.S. Send resume to Key L, The Journal, Oklahoma State Medical Association, 601 N.W. Expressway, Oklahoma City 73118.

The science of treating gas pain

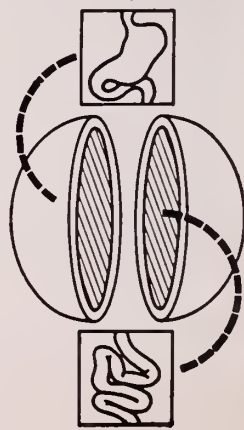
1. When gas is *entrapped* in the G.I. tract, it can cause pain severe enough to mimic that of peptic ulcer, angina pectoris, or myocardial infarction.^{1,2} **2.** Most of the gas symptoms brought to your attention will be due to gas trapped in the intestines, not the stomach. **3.** The source of most G.I. gas is air-swallowing, often an anxiety response of which the patient is unaware.

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1. Phasil is the only single-entity simethicone tablet with measured medication for both stomach and intestine. Phasil's protected inner core releases 40 mg. of *specially-activated* simethicone in the intestines, the most common site of gas entrapment. **2.** Phasil also releases 20 mg. of *specially-activated* simethicone while in transit through the stomach, for immediate dispersion of any gas accumulated there. **3.** Phasil is safe: no systemic effects, no untoward reactions, no contraindications.

Sig.: One Phasil tablet before meals and at bedtime provides reliable relief of gas pain, bloating and distention. Available in bottles of 100 tablets.

References: **1.** Roth, J. L.: *Ann. N.Y. Acad. Sci.* 150:109, Feb. 26, 1968. **2.** Reich, N. E., and Fremont, R. E. (eds.): *Chest Pain*, The Macmillan Company, New York, 1961, p. 348.



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Encounter under the Scanning Electron Microscope



SEM reveals changes in *E. coli* exposed to antibacterial agents

The Scanning Electron Microscope (SEM) is the only instrument which gives 3-dimensional views on a microscopic level. This permits the surface morphology of microorganisms to be observed in

detailed perspective. Changes in surface morphology of *E. coli* exposed to various antimicrobial agents are seen on the following page. An SEM photomicrograph of normal control *E. coli* appears above.



E. coli + sulfamethoxazole



E. coli + tetracycline



E. coli + cephalothin



E. coli + ampicillin

Different modes of antibacterial action — Similar changes in morphology

As part of a series of experiments,¹⁻³ strains of *E. coli* proven susceptible to each antibacterial agent were exposed to 1 MIC of the respective antibacterials for a three-hour period. Included were cell-wall-active drugs, ampicillin and cephalothin; a drug interfering with intracellular protein synthesis, tetracycline; and a chemical agent which acts by interference with para-aminobenzoic acid, sulfamethoxazole.

As seen above, elongation of the bacilli, mid-cell defects and spheroplast-like forms may be appreciated with the SEM technique. These changes in bacterial morphology were similar... regardless of the antibacterial agent used and irrespective of

its mechanism of action.

"At present, the significance of these observations in clinical infection must be considered with caution, but it is hoped that these data will stimulate a reevaluation of present concepts of the nature and role of morphological variants of bacteria exposed to a variety of antibacterial factors."²

It should be noted that no clinical conclusions can be drawn from this study, as it is not always possible to extrapolate *in vitro* data to humans.

References: 1. Klainer, A. S.; Fass, R. J., and Perkins, R. L.: Scientific Exhibit presented at the 25th American Medical Association Clinical Convention, New Orleans, La., Nov. 28-Dec. 1, 1971. 2. Klainer, A. S., and Perkins, R. L.: *Antimicrob. Agents Chemother.*, 1:164, 1972. 3. Klainer, A. S.: Data on file, Hoffmann-La Roche Inc., Nutley, N.J.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Acute, recurrent or chronic nonobstructed urinary tract infections (primarily pyelonephritis, pyelitis and cystitis) due to susceptible organisms. **Note:** Carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response; add aminobenzoic acid to follow-up culture media. The increasing frequency of resistant organisms limits the usefulness of antibacterials including sulfonamides, especially in chronic or recurrent urinary tract infections. Measure sulfonamide blood levels as variations may occur; 20 mg/100 ml should be maximum total level.

Contraindications: Sulfonamide hypersensitivity; pregnancy at term and during nursing period; infants less than two months of age.

Warnings: Safety during pregnancy has not been estab-

lished. Sulfonamides should not be used for group A beta-hemolytic streptococcal infections and will not eradicate or prevent sequelae (rheumatic fever, glomerulonephritis) of such infections. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been reported and early clinical signs (sore throat, fever, pallor, purpura or jaundice) may indicate serious blood disorders. Frequent CBC and urinalysis with microscopic examination are recommended during sulfonamide therapy. Insufficient data on children under six with chronic renal disease.

Precautions: Use cautiously in patients with impaired renal or hepatic function, severe allergy, bronchial asthma; in glucose-6-phosphate dehydrogenase-deficient individuals in whom dose-related hemolysis may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: Blood dyscrasias (agranulocytosis,

Encounter in Clinical Practice

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Antibacterial Gantanol® (sulfamethoxazole) controls susceptible strains of *E. coli* and other gram-negative and gram-positive organisms

often implicated in acute nonobstructed pyelonephritis and cystitis.

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It is not uncommon for the elderly and the debilitated to develop chronic and/or recurrent nonobstructed urinary tract infections such as pyelonephritis and cystitis. Such cases often re-

spond satisfactorily to Gantanol. The increasing frequency of resistant organisms is a limitation of usefulness of antibacterial agents including sulfonamides, especially in chronic or recurrent u.t.i.

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Either dosage form—the Tablets or the pleasant-tasting, cherry-flavored Suspension—can provide the dependable antibacterial activity necessary to control susceptible nonobstructed cystitis and pyelonephritis. Symptomatic improvement may usually be expected in 24 to 48 hours. The usual precautions with sulfonamide

therapy should be observed, including adequate fluid intake. Gantanol (sulfamethoxazole) is generally well tolerated with relative freedom from complications; the most common side effects are nausea, vomiting and diarrhea. Frequent c.b.c.'s and urinalyses with microscopic examination are recommended.

In nonobstructed cystitis and pyelonephritis due to susceptible organisms

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aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia); *allergic reactions* (erythema multiforme, skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis); *gastrointestinal reactions* (nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis); *CNS reactions* (headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia); *miscellaneous reactions* (drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon). Due to certain chemical similarities with some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia as well as thy-

roid malignancies in rats following long-term administration. Cross-sensitivity with these agents may exist.

Dosage: Systemic sulfonamides are contraindicated in infants under 2 months of age (except adjunctively with pyrimethamine in congenital toxoplasmosis).

Usual adult dosage: 2 Gm (4 tabs or teaspoon) initially, then 1 Gm b.i.d. or t.i.d. depending on severity of infection.

Usual child's dosage: 0.5 Gm (1 tab or teaspoon)/20 lbs of body weight initially, then 0.25 Gm/20 lbs b.i.d. Maximum dose should not exceed 75 mg/kg/24 hrs.

Supplied: Tablets, 0.5 Gm sulfamethoxazole; Suspension, 0.5 Gm sulfamethoxazole/teaspoonful.



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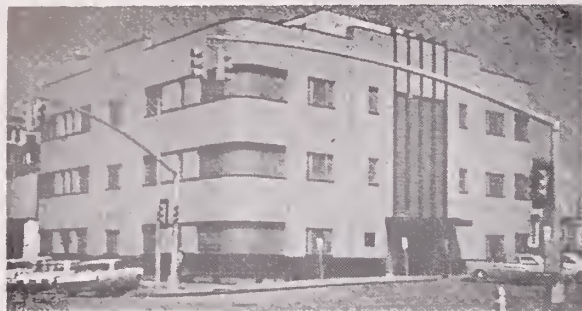
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The JOURNAL

of the Oklahoma State Medical Association

DEADLINES

February Issue

Editorial, Scientific, Book Reviews	December 15, 1972
Advertising Copy	January 15, 1973
News Copy, Miscellaneous Ads	February 1, 1973

CONTRIBUTIONS

Articles accepted for publication, including manuscripts of annual meeting papers, are the sole property of *The Journal* and must not have been published elsewhere. Authority for approval of all contributions rests with the Editorial Board, and the Board reserves the right to edit any material submitted. Manuscripts should be typewritten, double spaced and submitted in original and one copy. Receipt of manuscripts will be acknowledged and unused manuscripts returned. Used manuscripts will be returned on request. *The Journal of the Oklahoma State Medical Association* is not responsible for the statements or opinions of any contributor.

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




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ROBITUSSIN-DM®					
ROBITUSSIN-PE®					
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A-H-ROBINS



When you select this familiar antibiotic for IV infusion you have available a broad dosage range that hospitalized patients may need.

Intravenous Lincocin (lincomycin hydrochloride, Upjohn), with its 1.2 to 8 grams/day dosage range, covers many serious and even life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. Lincocin IV therefore can be as useful in your hospitalized patients as its IM use has proved to be in your office patients. As with all antibiotics, *in vitro* susceptibility studies should be performed.

1.2 to 8 grams/day IV dosage range:

Most hospitalized patients with uncomplicated pneumonias respond satisfactorily to 1.2 to 1.8 grams/day of Lincocin IV. These doses may have to be increased for more serious infections.

In life-threatening situations as much as 8 grams/day has been administered intravenously to adults.

In usual IV doses, Lincocin (lincomycin hydrochloride, Upjohn) should be diluted in 250 ml or more of normal saline solution or 5% glucose in water. But when 4 grams or more per day is given, Lincocin should be diluted in not less than 500 ml of either solution, and the rate of administration should not exceed 100 ml/hour. Too rapid intravenous administration of doses exceeding 4 grams may result in hypotension or, in rare instances, cardiopulmonary arrest.

Effective gram-positive antibiotic:

Lincocin IV is effective in respiratory tract, skin and soft-tissue, and bone



infections caused by susceptible strains of pneumococci, streptococci, and staphylococci, including penicillin-resistant strains. Staphylococcal strains resistant to Lincocin (lincomycin hydrochloride, Upjohn) have been recovered. Before initiating therapy, culture and susceptibility studies should be performed. Lincocin has proved valuable in treating patients hypersensitive to penicillin or cephalosporins, since Lincocin does not share antigenicity with these compounds. However, hypersensitivity reactions have been reported, some of these in patients known to be sensitive to penicillin.

Well tolerated at infusion site: Lincocin intravenous infusions have not produced local irritation or phlebitis, when given as recommended. Lincocin is usually well tolerated in patients who are hypersensitive to other drugs. Nevertheless, Lincocin should be used cautiously in patients with asthma or significant allergies.

In patients with impaired renal function, the recommended dose of Lincocin should be reduced to 25–30% of the dose for patients with normal kidney function. Its safety in pregnant patients and in infants less than one month of age has not been established.

Lincocin may be used with other antimicrobial agents: Since Lincocin is stable over a wide pH range, it is suitable for incorporation in intravenous infusions; it also may be

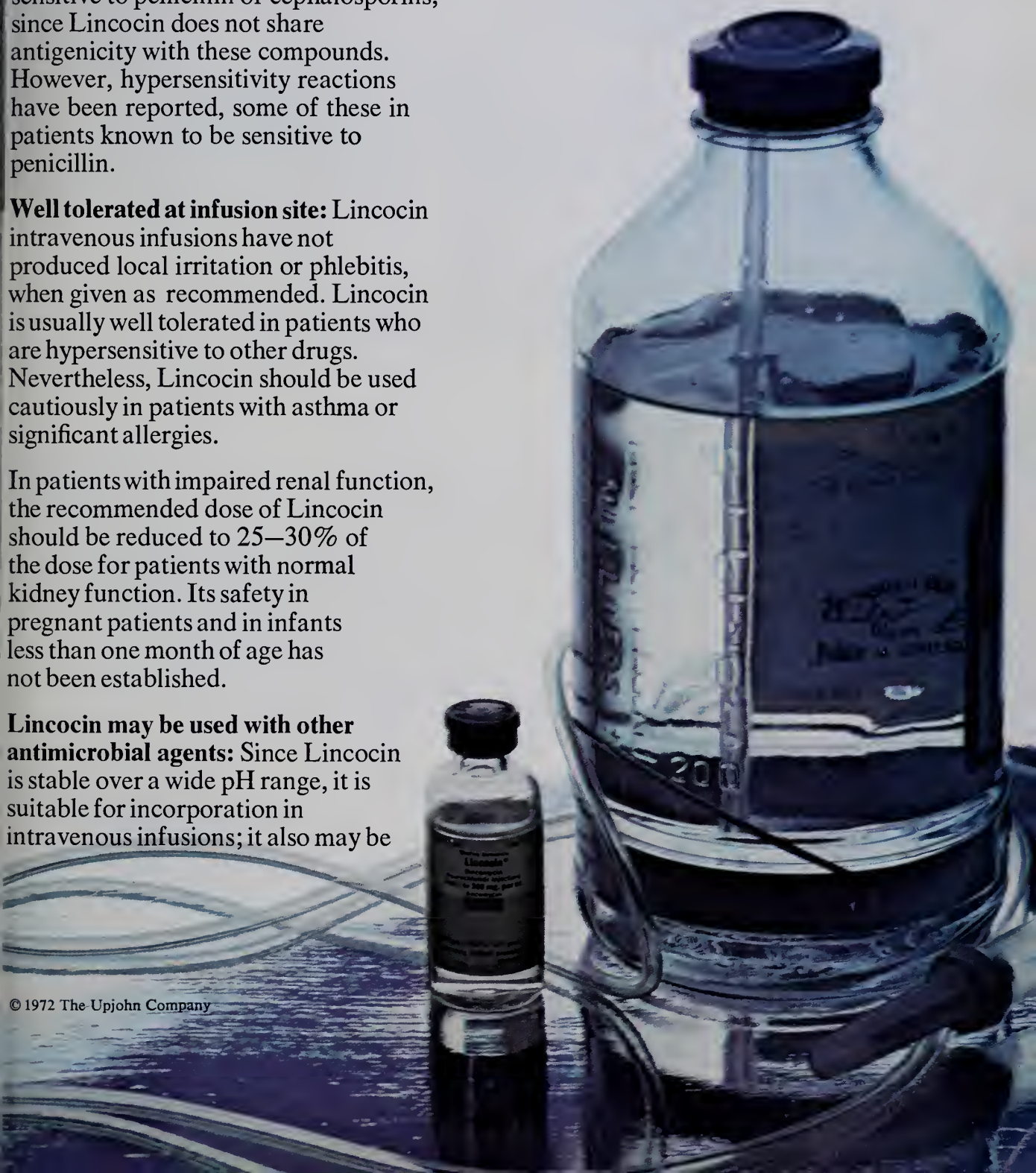
administered concomitantly with other antimicrobial agents when indicated. However, Lincocin should not be used with erythromycin, as *in vitro* antagonism has been reported.

Lincocin®

Sterile Solution (300 mg per ml)

(lincomycin hydrochloride, Upjohn)

For further prescribing information, please see following page.





Sterile Solution (300 mg. per ml.)

Lincocin[®]

(lincomycin hydrochloride, Upjohn)

Up to 8 grams per day by IV infusion for hospitalized patients with life-threatening infections.

Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. As with all antibiotics, *in vitro* susceptibility studies should be performed.

Each preparation contains:	Lincomycin hydrochloride monohydrate equivalent to lincomycin base
250 mg Pediatric Capsule	250 mg
500 mg Capsule	500 mg
*Sterile Solution per 1 ml	300 mg
Syrup per 5 ml	250 mg
*Contains also: Benzyl Alcohol 9 mg; and, Water for Injection—q.s.	

Lincocin (lincomycin hydrochloride) is indicated in infections due to susceptible strains of staphylococci, pneumococci, and streptococci. *In vitro* susceptibility studies should be performed. Cross resistance has not been demonstrated with penicillin, ampicillin, cephalosporins, chloramphenicol or the tetracyclines. Some cross resistance with erythromycin has been reported. Studies indicate that Lincocin does not share antigenicity with penicillin compounds.

CONTRAINDICATIONS: History of prior hypersensitivity to lincomycin or clindamycin. Not indicated in the treatment of viral or minor bacterial infections.

WARNINGS: CASES OF SEVERE AND PERSISTENT DIARRHEA HAVE BEEN REPORTED AND HAVE AT TIMES NECESSITATED DISCONTINUANCE OF THE DRUG. THIS DIARRHEA HAS BEEN OCCASIONALLY ASSOCIATED WITH BLOOD AND MUCUS IN THE STOOLS AND HAS AT TIMES RESULTED IN AN ACUTE COLITIS. THIS SIDE EFFECT USUALLY HAS BEEN ASSOCIATED WITH THE ORAL DOSAGE FORM BUT OCCASIONALLY HAS

BEEN REPORTED FOLLOWING PARENTERAL THERAPY. A careful inquiry should be made concerning previous sensitivities to drugs or other allergens. Safety for use in pregnancy has not been established and Lincocin (lincomycin hydrochloride) is not indicated in the newborn. Reduce dose 25 to 30% in patients with severe impairment of renal function.

PRECAUTIONS: Like any drug, Lincocin should be used with caution in patients having a history of asthma or significant allergies. Overgrowth of nonsusceptible organisms, particularly yeasts, may occur and require appropriate measures. Patients with pre-existing monilial infections requiring Lincocin therapy should be given concomitant antimicrobial treatment. During prolonged Lincocin therapy, periodic liver function studies and blood counts should be performed. Not recommended (inadequate data) in patients with pre-existing liver disease unless special clinical circumstances indicate. Continue treatment of β -hemolytic streptococci infections for 10 days to diminish likelihood of rheumatic fever or glomerulonephritis.

ADVERSE REACTIONS: *Gastrointestinal*—Glossitis, stomatitis, nausea, vomiting. Persistent diarrhea, enterocolitis, and pruritus ani. *Hemopoietic*—Neutropenia, leukopenia, agranulocytosis, and thrombocytopenic purpura have been reported. *Hypersensitivity reactions*—Hypersensitivity reactions such as angioneurotic edema, serum sickness, and anaphylaxis have been reported, sometimes in patients sensitive to penicillin. If allergic reaction occurs, discontinue drug. Have epinephrine, corticosteroids, and antihista-

mines available for emergency treatment. *Skin and mucous membranes*—Skin rashes, urticaria, vaginitis, and rare instances of exfoliative and vesiculobullous dermatitis have been reported. *Liver*—Although no direct relationship to liver dysfunction is established, jaundice and abnormal liver function tests (particularly serum transaminase) have been observed in a few instances. *Cardiovascular*—Instances of hypotension following parenteral administration have been reported, particularly after too rapid IV administration. Rare instances of cardiopulmonary arrest have been reported after too rapid IV administration. If 4.0 grams or more administered IV, dilute in 500 ml of fluid and administer no faster than 100 ml per hour. *Special senses*—Tinnitus and vertigo have been reported occasionally. *Local reactions*—Excellent local tolerance demonstrated to intramuscularly administered Lincocin (lincomycin hydrochloride). Reports of pain following injection have been infrequent. Intravenous administration of Lincocin in 250 to 500 ml of 5% glucose in distilled water or normal saline has produced no local irritation or phlebitis.

HOW SUPPLIED: 250 mg and 500 mg Capsules—bottles of 24 and 100. *Sterile Solution*, 300 mg per ml—2 and 10 ml vials and 2 ml syringe. *Syrup*, 250 mg per 5 ml—60 ml and pint bottles.

For additional product information, consult the package insert or see your Upjohn representative.

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People still look at their doctors as men to be respected and as men of integrity.

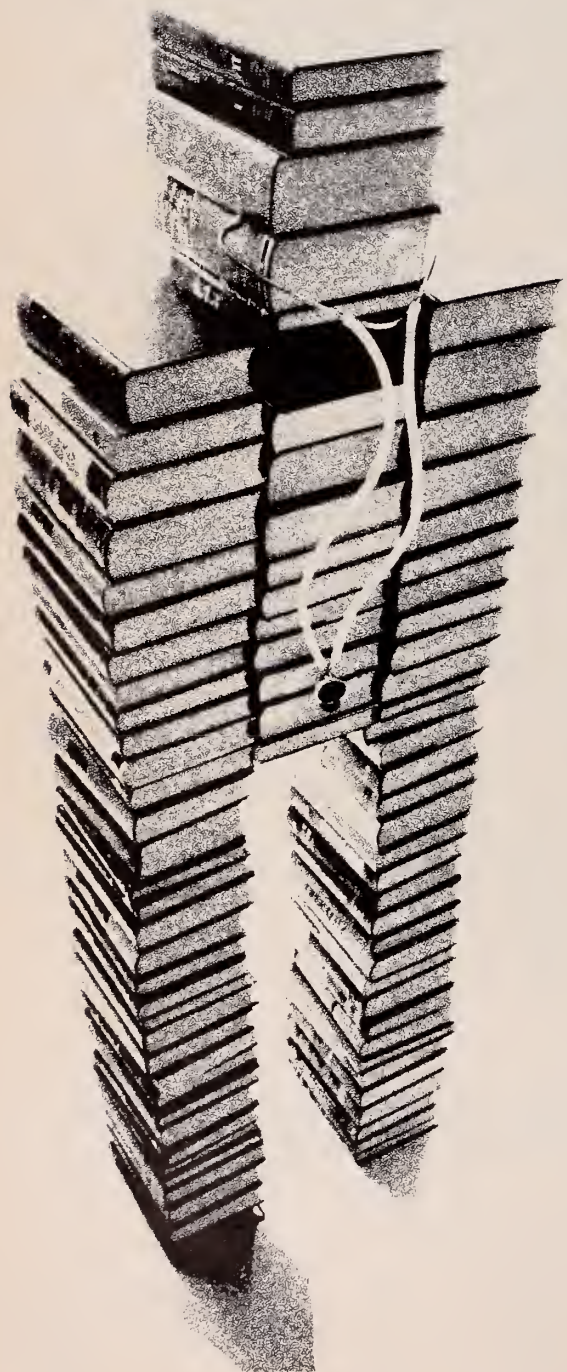
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Iron therapy for anemia is almost as old as history itself



Celsus's empirical use of iron

Aulus Cornelius Celsus recommended an unusual form of iron therapy for the treatment of enlarged spleens—the oral administration of water that blacksmiths had used for dousing white-hot iron.

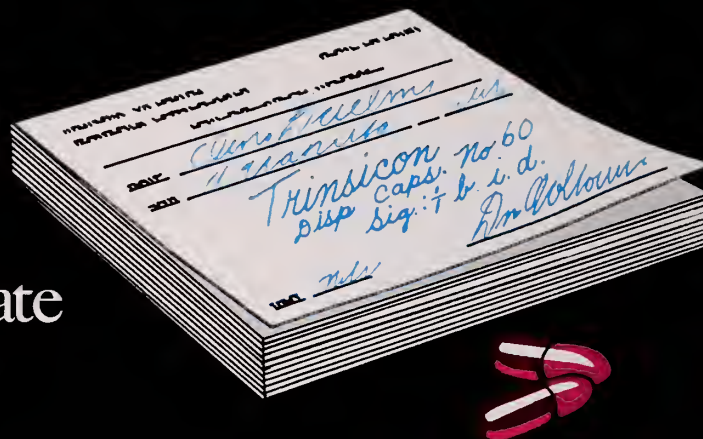
For more modern anemia therapy

Trinsicon[®]
Hematinic Concentrate
with Intrinsic Factor

(See reverse side for prescribing information.)

Trinsicon®

Hematinic Concentrate with Intrinsic Factor



Description: Each Pulvule® contains—

Special Liver-Stomach Concentrate, Lilly
(containing Intrinsic Factor) 240 mg.
Cobalamin Concentrate, N.F., equivalent to Cobalamin 7.5 mcg.
(The total vitamin B₁₂ activity in the Special Liver-Stomach Concentrate, Lilly, and the Cobalamin Concentrate, N.F., is 15 micrograms.)

Iron, Elemental (as Ferrous Fumarate) 110 mg.
Ascorbic Acid (Vitamin C) 75 mg.
Folic Acid 0.5 mg.

Indications: Trinsicon is a multifactor preparation effective in the treatment of anemias that respond to oral hematinics, including pernicious anemia and other megaloblastic anemias and also iron-deficiency anemia. Therapeutic quantities of hematopoietic factors that are known to be important are present in the recommended daily dose.

Vitamin B₁₂ with Intrinsic Factor—When secretion of intrinsic factor in gastric juice is inadequate or absent (e.g., in Addisonian pernicious anemia or after gastrectomy), vitamin B₁₂ in physiological doses is absorbed poorly, if at all. The resulting deficiency of vitamin B₁₂ leads to the clinical manifestations of pernicious anemia. Similar megaloblastic anemias may develop in fish tapeworm (*Diphyllobothrium latum*) infection or after a surgically created small-bowel blind loop; in these situations, treatment requires freeing the host of the parasites or bacteria which appear to compete for the available vitamin B₁₂. Strict vegetarianism and malabsorption syndromes may also lead to vitamin B₁₂ deficiency. In the latter case, parenteral therapy, or oral therapy with so-called massive doses of vitamin B₁₂, may be necessary for adequate treatment of the patient.

Potency of intrinsic factor concentrates is determined physiologically, i.e., by their use in patients with pernicious anemia. The liver-stomach concentrate with intrinsic factor and the vitamin B₁₂ contained in two Pulvules Trinsicon provide 1½ times the minimum amount of therapeutic agent which, when given daily in an uncomplicated case of pernicious anemia, will produce a satisfactory reticulocyte response and relief of anemia and symptoms.

Concentrates of intrinsic factor derived from hog gastric, pyloric, and duodenal mucosa have been used successfully in patients who lack intrinsic factor. For example, Fouts *et al.* maintained patients with pernicious anemia in clinical remission with oral therapy (liver extracts or intrinsic factor concentrate with vitamin B₁₂) for as long as twenty-nine years.

After total gastrectomy, Ficarra found multifactor preparations taken orally to be "just as effective in maintaining blood levels as any medication that has to be administered parenterally." His study was based on twenty-four patients who had survived for five years after total gastrectomy for cancer and who had been taking two Pulvules Trinsicon daily.

Folic Acid—Folic acid deficiency is the immediate cause of most, if not all, cases of nutritional megaloblastic anemia and of the megaloblastic anemias of pregnancy and infancy; usually, it is also at least partially responsible for the megaloblastic anemias of malabsorption syndromes, e.g., tropical and nontropical sprue.

It is apparent that in vitamin B₁₂ deficiency (e.g., pernicious anemia), lack of this vitamin results in impaired utilization of folic acid. There are other evidences of the close folic acid-vitamin B₁₂ interrelationship: (1) B₁₂ influences the storage, absorption, and utilization of folic acid, and (2), as a deficiency of B₁₂ progresses, the requirement for folic acid increases. However, folic acid does not change the requirement for vitamin B₁₂.

Iron—A very common anemia is that due to iron deficiency. In most cases, the response to iron salts is prompt, safe, and predictable. Within limits, the response is quicker and more certain to large doses of iron than to small doses.

Each Pulvule Trinsicon furnishes 110 mg. of elemental iron (as ferrous fumarate) to provide a maximum response.

Ascorbic Acid—Vitamin C plays a role in anemia therapy. It augments the conversion of folic acid to its active form, folinic acid. In addition, ascorbic acid promotes the reduction of ferric iron in food to the more readily absorbed ferrous form. Severe and prolonged vitamin C deficiency is associated with an anemia which is usually hypochromic but occasionally megaloblastic in type.

Contraindications and Precautions: Anemia is a manifestation that requires appropriate investigation to determine its cause or causes.

Folic acid *alone* is unwarranted in the treatment of pure vitamin-B₁₂-deficiency states, such as pernicious anemia. Indeed, the use of folic acid in large doses in pernicious anemia without adequate vitamin B₁₂ may result in hematologic remission but neurological progression.

As with all preparations containing intrinsic factor, resistance may develop in some cases of pernicious anemia to the potentiation of absorption of physiological doses of vitamin B₁₂. If resistance occurs, parenteral therapy, or oral therapy with so-called massive doses of vitamin B₁₂, may be necessary for adequate treatment of the patient. No single regimen fits all cases, and the status of the patient observed in follow-up is the final criterion for adequacy of therapy. Periodic clinical and laboratory studies are considered essential and are recommended.

In extremely rare instances, skin rash suggesting allergy has been noted following the oral administration of liver-stomach material. Allergic sensitization has been reported following both oral and parenteral administration of folic acid.

Hemochromatosis and hemosiderosis are contraindications to iron therapy.

Adverse Reactions: In rare instances, iron in therapeutic doses produces gastrointestinal reactions, such as diarrhea or constipation. Reducing the dose and administering it with meals will minimize these effects in the iron-sensitive patient.

Dosage: One Pulvule twice a day. (Two Pulvules daily produce a standard response in the average uncomplicated case of pernicious anemia.)

How Supplied: Pulvules Trinsicon® (hematinic concentrate with intrinsic factor, Lilly), in bottles of 60 and 500 and in *Identi-Dose*® (unit dose medication, Lilly) in boxes of 100.

Trinsicon®

Hematinic Concentrate with Intrinsic Factor

A Comprehensive Hematinic

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Eli Lilly and Company
Indianapolis, Indiana 46206





rheumatoid arthritic blowup...

Tandearil® Geigy
oxyphenbutazone NF

tablets of 100 mg.

Important Note: This drug is not a simple analgesic. Do not administer casually. Carefully evaluate patients before starting treatment and keep them under close supervision. Obtain a detailed history, and complete physical and laboratory examination (complete hemogram, urinalysis, etc.) before prescribing and at frequent intervals thereafter. Carefully select patients, avoiding those responsive to routine measures, contraindicated patients or those who cannot be observed frequently. Warn patients not to exceed recommended dosage. Short-term relief of severe symptoms with the smallest possible dosage is the goal of therapy. Dosage should be taken with meals or a full glass of milk. Patients should discontinue the drug and report immediately any sign of: fever, sore throat, oral lesions (symptoms of blood dyscrasia); dyspepsia, epigastric pain, symptoms of anemia, black or tarry stools or other evidence of intestinal ulceration or hemorrhage, skin reactions, significant weight gain or edema. A one-week trial period is adequate. Discontinue in the absence of a favorable response. Restrict treatment periods to one week in patients over sixty.

Indications: Acute gouty arthritis, rheumatoid arthritis, rheumatoid spondylitis.

Contraindications: Children 14 years or less; senile patients; history or symptoms of G.I. inflammation or ulceration including severe, recurrent or persistent dyspepsia; history or presence of drug allergy; blood dyscrasias; renal, hepatic or cardiac dysfunction; hypertension; thyroid disease; systemic edema; stomatitis and salivary gland enlargement due to the drug; polymyalgia rheumatica and temporal arteritis; patients receiving other potent chemotherapeutic agents, or long-term anticoagulant therapy.

Warnings: Age, weight, dosage, duration of therapy, existence of concomitant diseases, and concurrent potent chemotherapy affect incidence of toxic reactions. Carefully instruct and observe the individual patient, especially the aging (forty years and over) who have increased susceptibility to the toxicity of the drug. Use lowest effective dosage. Weigh initially, unpredictable benefits against potential risk of severe, even fatal, reactions. The disease condition itself is

unaltered by the drug. Use with caution in first trimester of pregnancy and in nursing mothers. Drug may appear in cord blood and breast milk. Serious, even fatal, blood dyscrasias, including aplastic anemia, may occur suddenly despite regular hemograms, and may become manifest days or weeks after cessation of drug. Any significant change in total white count, relative decrease in granulocytes, appearance of immature forms, or fall in hematocrit should signal immediate cessation of therapy and complete hematologic investigation. Unexplained bleeding involving CNS, adrenals, and G.I. tract has occurred. The drug may potentiate action of insulin, sulfonylurea, and sulfonamide-type agents. Carefully observe patients taking these agents. Nontoxic and toxic goiters and myxedema have been reported (the drug reduces iodine uptake by the thyroid). Blurred vision can be a significant toxic symptom worthy of a complete ophthalmological examination. Swelling of ankles or face in patients under sixty may be prevented by reducing dosage. If edema occurs in patients over sixty, discontinue drug.

Precautions: The following should be accomplished at regular intervals: Careful detailed history for disease being treated and detection of earliest signs of adverse reactions; complete physical examination including check of patient's weight; complete weekly (especially for the aging) or an every two week blood check; pertinent laboratory studies. Caution patients about participating in activity requiring alertness and coordination, as driving a car, etc. Cases of leukemia have been reported in patients with a history of short- and long-term therapy. The majority of these patients were over forty. Remember that arthritic-type pains can be the presenting symptom of leukemia.

Adverse Reactions: This is a potent drug; its misuse can lead to serious results. Review detailed information before beginning therapy. Ulcerative esophagitis, acute and reactivated gastric and duodenal ulcer with perforation and hemorrhage, ulceration and perforation of large bowel, occult G.I. bleeding with anemia, gastritis, epigastric pain, hematemesis, dyspepsia, nausea, vomiting and diarrhea, abdominal

distention, agranulocytosis, aplastic anemia, hemolytic anemia, anemia due to blood loss including occult G.I. bleeding, thrombocytopenia, pancytopenia, leukemia, leukopenia, bone marrow depression, sodium and chloride retention, water retention and edema, plasma dilution, respiratory alkalosis, metabolic acidosis, fatal and nonfatal hepatitis (cholestasis may or may not be prominent), petechiae, purpura without thrombocytopenia, toxic pruritus, erythema nodosum, erythema multiforme, Stevens-Johnson syndrome, Lyell's syndrome (toxic necrotizing epidermolysis), exfoliative dermatitis, serum sickness, hypersensitivity angitis (polyarteritis), anaphylactic shock, urticaria, arthralgia, fever, rashes (all allergic reactions require prompt and permanent withdrawal of the drug), proteinuria, hematuria, oliguria, anuria, renal failure with azotemia, glomerulonephritis, acute tubular necrosis, nephrotic syndrome, bilateral renal cortical necrosis, renal stones, ureteral obstruction with uric acid crystals due to uricosuric action of drug, impaired renal function, cardiac decompensation, hypertension, pericarditis, diffuse interstitial myocarditis with muscle necrosis, perivascular granulomata, aggravation of temporal arteritis in patients with polymyalgia rheumatica, optic neuritis, blurred vision, retinal hemorrhage, toxic amblyopia, retinal detachment, hearing loss, hyperglycemia, thyroid hyperplasia, toxic goiter association of hyperthyroidism and hypothyroidism (causal relationship not established), agitation, confusional states, lethargy; CNS reactions associated with overdosage, including convulsions, euphoria, psychosis, depression, headaches, hallucinations, giddiness, vertigo, coma, hyperventilation, insomnia; ulcerative stomatitis, salivary gland enlargement. (B) 98-146-800-E

For complete details, including dosage, please see full prescribing information.

GEIGY Pharmaceuticals
Division of CIBA-GEIGY Corporation
Ardsley, New York 10502



a new outlook in chronic pain

of moderate to severe intensity

Though Talwin® Tablets, brand of pentazocine (as hydrochloride), can be compared to codeine in analgesic efficacy, Talwin is not subject to narcotic controls. Patients receiving Talwin Tablets for prolonged periods face fewer of the consequences you've come to expect with meperidine or codeine. And that, in the long run, can mean a better outlook for your chronic-pain patient.

Talwin Tablets are:

- **Comparable to codeine in analgesic efficacy:** one 50 mg. Talwin Tablet appears equivalent in analgesic effect to 60 mg. (1 gr.) of codeine. Onset of significant analgesia usually occurs within 15 to 30 minutes. Analgesia is usually maintained for 3 hours or longer.
- **Tolerance not a problem:** tolerance to the analgesic effect of Talwin Tablets has not been reported, and no significant changes in clinical laboratory parameters attributable to the drug have been reported.
- **Dépendence rarely a problem:** during three years of wide clinical use, only a few cases of dependence have been reported. In prescribing Talwin for chronic use, the physician should take precautions to avoid increases in dose by the patient and to prevent the use of the drug in anticipation of pain rather than for the relief of pain.
- **Not subject to narcotic controls:** convenient to prescribe — day or night — even by phone.
- **Generally well tolerated by most patients:** infrequently cause decrease in blood pressure or tachycardia; rarely cause respiratory depression or urinary retention; seldom cause diarrhea or constipation. If dizziness, light-headedness, nausea or vomiting are encountered, these effects tend to be self-limiting and to decrease after the first few doses. (See last page of this advertisement for a complete discussion of adverse reactions and a brief discussion of other Prescribing Information.)

50 mg. Tablets

Talwin®

brand of

pentazocine (as hydrochloride)

the long-range analgesic

a new outlook in chronic pain

of moderate to severe intensity



Contraindications: Talwin, brand of pentazocine (as hydrochloride), should not be administered to patients who are hypersensitive to it. **Warnings:** *Head Injury and Increased Intracranial Pressure.* The respiratory depressant effects of Talwin and its potential for elevating cerebrospinal fluid pressure may be markedly exaggerated in the presence of head injury, other intracranial lesions, or a pre-existing increase in intracranial pressure. Furthermore, Talwin can produce effects which may obscure the clinical course of patients with head injuries. In such patients, Talwin must be used with extreme caution and only if its use is deemed essential.

Usage in Pregnancy. Safe use of Talwin during pregnancy (other than labor) has not been established. Animal reproduction studies have not demonstrated teratogenic or embryotoxic effects. However, Talwin should be administered to pregnant patients (other than labor) only when, in the judgment of the physician, the potential benefits outweigh the possible hazards. Patients receiving Talwin during labor have experienced no adverse effects other than those that occur with commonly used analgesics. Talwin should be used with caution in women delivering premature infants.

Drug Dependence. There have been instances of psychological and physical dependence on parenteral Talwin in patients with a history of drug abuse and, rarely, in patients without such a history. Abrupt discontinuance following the extended use of parenteral Talwin has resulted in withdrawal symptoms. There have been a few reports of dependence and of withdrawal symptoms with orally administered Talwin. Patients with a history of drug dependence should be under close supervision while receiving Talwin orally.

In prescribing Talwin for chronic use, the physician should take precautions to avoid increases in dose by the patient and to prevent the use of the drug in anticipation of pain rather than for the relief of pain.

Acute CNS Manifestations. Patients receiving therapeutic doses of Talwin have experienced, in rare instances, hallucinations (usually visual), disorientation, and confusion which have cleared spontaneously within a period of hours. The mechanism of this reaction is not known. Such patients should be very closely observed and vital signs checked. If the drug is reinstituted it should be done with caution since the acute CNS manifestations may recur.

Usage in Children. Because clinical experience in children under 12 years of age is limited, administration of Talwin in this age group is not recommended.

Ambulatory Patients. Since sedation, dizziness, and occasional euphoria have been noted, ambulatory patients should be warned not to operate machinery, drive cars, or unnecessarily expose themselves to hazards.

Precautions: Certain Respiratory Conditions. Although respiratory depression has rarely been reported after oral administration of Talwin, the drug should be administered with caution to patients with respiratory depression from any cause, severe bronchial asthma and other obstructive respiratory conditions, or cyanosis.

Impaired Renal or Hepatic Function. Decreased metabolism of the drug by the liver in extensive liver disease may predispose to accentuation of side effects. Although laboratory tests have not indicated that Talwin causes or increases renal or hepatic impairment, the drug should be administered with caution to patients with such impairment.

Myocardial Infarction. As with all drugs, Talwin should be used with caution in patients with myocardial infarction who have nausea or vomiting.

Biliary Surgery. Until further experience is gained with the effects

of Talwin on the sphincter of Oddi, the drug should be used with caution in patients about to undergo surgery of the biliary tract. **Patients Receiving Narcotics.** Talwin is a mild narcotic antagonist. Some patients previously receiving narcotics have experienced mild withdrawal symptoms after receiving Talwin.

CNS Effect. Caution should be used when Talwin is administered to patients prone to seizures; seizures have occurred in a few such patients in association with the use of Talwin although no cause and effect relationship has been established.

Adverse Reactions: Reactions reported after oral administration of Talwin include *gastrointestinal:* nausea, vomiting; infrequently constipation; and rarely abdominal distress, anorexia, diarrhea. *CNS effects:* dizziness, lightheadedness, sedation, euphoria, headache; infrequently weakness, disturbed dreams, insomnia, syncope, visual blurring and focusing difficulty, hallucinations (see *Acute CNS Manifestations* under WARNINGS); and rarely tremor, irritability, excitement, tinnitus. *Autonomic:* sweating; infrequently flushing; and rarely chills. *Allergic:* infrequently rash; and rarely urticaria, edema of the face. *Cardiovascular:* infrequently decrease in blood pressure, tachycardia. *Other:* rarely respiratory depression, urinary retention.

Dosage and Administration: Adults. The usual initial adult dose is 1 tablet (50 mg.) every three or four hours. This may be increased to 2 tablets (100 mg.) when needed. Total daily dosage should not exceed 600 mg.

When antiinflammatory or antipyretic effects are desired in addition to analgesia, aspirin can be administered concomitantly with Talwin.

Children Under 12 Years of Age. Since clinical experience in children under 12 years of age is limited, administration of Talwin in this age group is not recommended.

Duration of Therapy. Patients with chronic pain who have received Talwin orally for prolonged periods have not experienced withdrawal symptoms even when administration was abruptly discontinued (see WARNINGS). No tolerance to the analgesic effect has been observed. Laboratory tests of blood and urine and of liver and kidney function have revealed no significant abnormalities after prolonged administration of Talwin.

Overdosage: Manifestations. Clinical experience with Talwin overdosage has been insufficient to define the signs of this condition.

Treatment. Oxygen, intravenous fluids, vasopressors, and other supportive measures should be employed as indicated. Assisted or controlled ventilation should also be considered. Although nalorphine and levallorphan are not effective antidotes for respiratory depression due to overdosage or unusual sensitivity to Talwin, parenteral naloxone (Narcan®, available through Endo Laboratories) is a specific and effective antagonist. If naloxone is not available, parenteral administration of the analeptic, methylphenidate (Ritalin®), may be of value if respiratory depression occurs.

Talwin is not subject to narcotic controls.

How Supplied: Tablets, peach color, scored. Each tablet contains Talwin (brand of pentazocine) as hydrochloride equivalent to 50 mg. base. Bottles of 100.

Winthrop

Winthrop Laboratories, New York, N. Y. 10016 (1583)

50 mg. Tablets

Talwin®
brand of
pentazocine (as hydrochloride)

the long-range analgesic

"The history of science, and in particular the history of medicine... is... the history of man's reactions to the truth, the history of the gradual revelation of truth, the history of the gradual liberation of our minds from darkness and prejudice."

—George Sarton, from "The History of Medicine Versus the History of Art"

Are combination drug products useful in treatment involving concomitant use of two or more drugs?

Opinion

Results of a questionnaire to 7,000 physicians:

62.9%

Believe combination drug products are useful.

13.8%

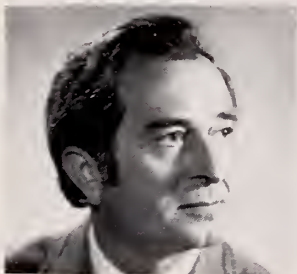
Do not believe combination drug products are useful.

Are combination drug products useful in treatment involving concomitant use of two or more drugs?

Opinion & Dialogue

Doctor of Medicine

Louis Lasagna, M.D.
Professor and Chairman
Department of
Pharmacology & Toxicology
University of Rochester
School of Medicine
and Dentistry



Obviously, many drugs are given concomitantly. Whether it makes sense to combine medications in one preparation, be it capsule, tablet, or liquid, is a question that can be answered only by examining the advantages and disadvantages in the individual case.

Among the advantages is, first of all, convenience. The more medications that are taken concurrently and the more complicated the directions, the less likely the patient is to take medications accurately. From the standpoint of convenience and accuracy, and economy as well, you can make an important case for putting medications together in one preparation, as long as they are compatible.

By the same token, when you prescribe a properly tested and rational combination, you should have less worry about pharmaceutical or pharmacological compatibility — and about reasonable dosage ratios as well. Compatibility of the formulation should be demonstrated in the laboratory and clinic before the product is available for prescription—which is more than can usually be said for

the physician's own spontaneous creations. And, the dosage ratios employed in rational precompounded combinations are designed to meet the needs of substantial numbers of "typical" patients.

There is no doubt that many "atypical" patients are to be found, and for them the prefabricated combination must be rejected. But that hardly argues for eliminating rational combinations from the market. Think, for example, of the problems that would arise if the components of widely accepted combinations, like the oral contraceptives and the diuretic-antihypertensives, always had to be prescribed, purchased and ingested separately.

One disadvantage that comes to mind is some doctors' unawareness of the ingredients a given combination contains. For example, a doctor might know that a patient is allergic to aspirin but forget that a certain analgesic mixture, which he knows only by its trade name, contains aspirin. His prescription, then, causes considerable discomfort, to say the least. This problem is a function of physician education, rather than of combination therapy as such. Improving doctors' knowledge about all medicaments they prescribe is a problem that deserves tackling on its own.

Another accusation leveled at combination drugs is that they encourage sloppiness of diagnosis and treatment. In many cases, however, a combination may prove to be the most effective choice. A good ex-

ample of the usefulness of combinations appears in a recent article in the *Journal of Chronic Diseases* on the efficacy and side effects of an antihypertensive containing three ingredients, in which the track records of the combination drug and the individual ingredients were compared. Interestingly enough, whether the drugs were given individually or together, incidence and severity of side effects were the same. But blood pressure control was invariably better when the drugs were taken in one combination tablet than when they were taken separately (in "titratable" dosage) or in two or three different tablets.

Deciding which combinations constitute rational therapy obviously leads to a discussion of who is to determine which should be used and which should not. Realistically, I think combinations should be evaluated somewhat differently if they are old and established or new and untried.

In today's regulatory atmosphere, there is no possibility of a new combination being put on the market without a substantial amount of acceptable evidence in the form of controlled trials that show it to be safe and efficacious. On the other hand, I believe a different set of standards should apply to combination preparations that have been around for a long time. In other words, physician acceptance over a long period should be given some weight as evidence of the efficacy and safety of these drugs.

The FDA, however, does not seem to share this attitude. It often requires, for these older products, controlled trials that will monopolize the time of already overtired investiga-

tors and cost a great deal of money. I wish we could agree on a "grandfather clause" approach to preparations that have been in use for a number of years and that have an apparently satisfactory track record.

For example, I think some of the antibiotic combinations that were taken off the market by the FDA performed quite well. I am thinking particularly of penicillin-streptomycin combinations that patients—especially surgical patients—were given in oral injection. This made for less discomfort for the patient, less demand on nurses' time, and fewer opportunities for dosing errors. To take such preparation off the market doesn't seem to be good medicine, unless actual usage showed a great deal of harm from the injection (rather than the proper use) of the combination.

The point that should be emphasized is that there are both rational and irrational combinations. The real question is, who should determine which is which? Obviously, the FDA must play a major role in making this determination. In fact, I don't think it can avoid taking the ultimate responsibility, but it should enlist the help of outside physicians and experts in assessing the evidence and in making the ultimate decision.

Maker of Medicine

W. Clarke Wescoe, M.D.
President
Winthrop Laboratories



If two medications are used effectively to treat a certain condition, and it is known that they are compatible, it clearly is useful and convenient to provide them in one dosage form. It would make no sense, in fact it would be pedantic, to insist they always be prescribed separately. To avoid the appearance of pedantry, the "expert" denies the combination because it is a fixed dosage form. When the "expert" invokes the concept of fixed dosage form he obscures the fact that single-ingredient pharmaceutical preparations are also fixed dosage forms. By a singular semantic exercise he implies a pejorative meaning to the term "fixed dose" only when he uses it with respect to combinations. What is ignored is the simple fact that only in the rarest of circumstances does any physician attempt to titrate an exact therapeutic response in his patient. It is quite possible that some aches and pains will respond to 500 mg. of aspirin yet that fact does not militate against the usual dose being 650 mg.

The other semantic ploy often called into play is to describe a combination product as rational or irrational.

Take antibiotic mixtures, the source of much of the criticism generated against

combinations generally. Obviously, no one should be exposed willy-nilly to the potential side effects of two or three antibiotics when only one is needed. At the same time there are cases where it is prudent to prescribe more than one. The clinician is the judge in these circumstances, as he should be.

There is no clear definition of the word rational. Most persons, I suppose, would find it synonymous with reasonable, but in many circumstances it may best be defined as the opinion of those in power at the moment.

Other factors govern combination therapy, not the least of which has been its broad use by practicing physicians anxious to achieve convenience in prescribing, to reduce medication error, and to save money for their patients. Combinations clearly have met the test on all three counts.

I have been impressed by studies showing that the rate of error climbs markedly with the number of medications to be taken, even with sophisticated patients. When medically justified, therefore, this factor alone supports the logic of combination therapy.

The cost argument for combinations appears to be irrefutable. In 1971, R. A. Gosselin studied the 71 combination products (excluding oral contraceptives) among the 200 most prescribed drugs. The study found that if all 71 products were discontinued, and if each ingredient in these combinations were prescribed separately, the price of medicines to patients would jump by \$443.2 million on a national basis! At a time when the cost of medical care is under so much fire, it would be nonsensical to boost costs without clearly irre-

futable medical reasons.

The part played by government on this question, of course, is fundamental. The FDA should play a role in determining which combinations are reasonable. That role, as defined by law and regulation, is to ensure that any medication on the market is safe and effective in line with its label claims. Certainly combinations are entitled to as much consideration as single entities—neither more nor less. So long as the addition of one drug to another does not make either less safe, or less effective, so long as they are compatible in a formulation, we have a reasonable product. It makes no sense to recommend the use of two products for certain conditions and to deny their being combined in a single form. An unhappy side effect of the problem concerns the efficacy panel discussions of many products submitted for review. The term "effective, but" has been freely interpreted to mean "ineffective" in toto, regardless of the merit of the individual drugs. This interpretation has placed numerous useful combination products in needless jeopardy.

In reading the actual reports of the review panels, it seems clear that some of the ratings were based less on scientific research and clinical observation than on the "informed" opinions of the panelists. These "informed" opinions were accepted at face value, while

the "informed" opinions of others who had used the products were rejected. All of this put combination products into a sort of scientific never-never land.

It should be kept in mind by all, government as well as others involved in our health care system, that advances in therapy are seldom made in leaps and bounds but rather by small painstaking steps—and that some of these steps have resulted from research in combination drugs as well as with single entities. Given the near-infinite biologic variation in patient response, this is hardly surprising to clinicians. It should not be to regulatory agencies either.

In the end, the practicing physician is in the best position to decide if a particular combination makes sense. Such a decision should not be made exclusively by those whose responsibility for continuing clinical care is limited. Clinicians are the best judges of efficacy because the ultimate proof of any product's effectiveness is acceptance by physicians who have observed its actions in patients over time. The corollary statement may be made about over-the-counter medicines, which would not long survive if they failed to afford the relief the user anticipates. That the antihistamine in a "cold" remedy may not *always* be necessary is no reason to proscrib the combination generally.

Opinion & Dialogue

What is your opinion, doctor?

We would welcome your comments.



The Pharmaceutical Manufacturers Association
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He won't resist feeling better with **Mylanta[®]**

Because the taste is good.

- ☐ promptly relieves hyperacidity
- ☐ also relieves fullness and bloating
- ☐ non-constipating



LIQUID **MYLANTA[®]** TABLETS

aluminum and magnesium hydroxides with simethicone



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**if skin is infected,
or open to infection...
choose the topical
that gives your patient—**

- ☞ broad antibacterial activity against susceptible skin invaders
- ☞ low allergenic risk—prompt clinical response

Special Petrolatum Base
Neosporin[®] Ointment
(polymyxin B-bacitracin-neomycin)

Each gram contains: Aerosporin[®] brand Polymyxin B Sulfate, 5000 units; zinc bacitracin, 400 units; neomycin sulfate, 5 mg. (equivalent to 3.5 mg. neomycin base); special white petrolatum q. s.
In tubes of 1 oz. and ½ oz. for topical use only.

NEOSPORIN for topical infections due to susceptible organisms, as in impetigo, surgical aftercare, and pyogenic dermatoses.

Precaution: As with other antibiotic preparations, prolonged use may result in overgrowth of nonsusceptible organisms and/or fungi. Appropriate measures should be taken if this occurs. Articles in the current medical literature indicate an increase in the prevalence of persons allergic to neomycin. The possibility of such a reaction should be borne in mind.

Contraindications: Not for use in the external ear canal if the eardrum is perforated. This product is contraindicated in those individuals who have shown hypersensitivity to any of its components.

Complete literature available on request from Professional Services Dept. PML.



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When irritable colon feels like this



...in the presence of spasm or hypermotility,
gas distention and discomfort, **KINESED®**
provides more complete relief:

- ☐ belladonna alkaloids—for the hyperactive bowel
- ☐ simethicone—for accompanying distention and pain due to gas
- ☐ phenobarbital—for associated anxiety and tension

Contraindications: Hypersensitivity to barbiturates or belladonna alkaloids, glaucoma, advanced renal or hepatic disease.

Precautions: Administer with caution to patients with incipient glaucoma, bladder neck obstruction or urinary bladder atony. Prolonged use of barbiturates may be habit-forming.

Side effects: Blurred vision, dry mouth, dysuria, and other

atropine-like side effects may occur at high doses, but are only rarely noted at recommended dosages.

Dosage: *Adults:* One or two tablets three or four times daily. Dosage can be adjusted depending on diagnosis and severity of symptoms.

Children 2 to 12 years: One-half or one tablet three or four times daily. Tablets may be chewed or swallowed with liquids.



STUART PHARMACEUTICALS | Division of ICI America Inc. | Wilmington, Del. 19899 | Pasadena, Calif. 91109

(from the Greek *kinetikos*,
to move,
and the Latin *sedatus*,
to calm)

KINESED®

antispasmodic/sedative/antiflatulent

Each *chewable tablet* contains: 16 mg. phenobarbital (warning: may be habit-forming); 0.1 mg. hyoscyamine sulfate; 0.02 mg. atropine sulfate; 0.007 mg. scopolamine hydrobromide; 40 mg. simethicone.

Chuckwalla (*Sauromalus obesus*):
This southwestern desert lizard seeks
shelter in crevices of rocks.
When attempts are made to probe him
from his niche, he gulps air
until his torso is distended up to
sixty per cent over its normal size...
thus wedging himself tightly
in place and preventing capture.

YOUR POLITICAL RESPONSIBILITY

November 7th, 1972 may well be carved in the records as one of the most significant in the history of the world. On this date, the people of America have the opportunity to make a clear choice between two opposing philosophies of government.

One of these philosophies has, as a basic tenant, that from the top down, the function of government is to do everything for the people. The basic tenant of the opposing philosophy is that the purpose of government is to make it possible for the people to do the most for themselves.

A free society remains free only when there is continuous participation of the governed in the institutions of government.

Only 55 percent of those eligible actually voted in the November, 1970 election.

No right is more basic than every citizen's right to choose political candidates freely in secret ballot on the basis of qualifications and issues. This right must not be neglected. Be sure all eligible voters in your family are properly registered to vote in the upcoming November election and then go VOTE.

Some thoughts gathered from the material furnished by AMPAC to PAC members emphasizes the implementation of your political responsibility.

We have not only an opportunity but an obligation to become involved in the political spectrum. Politics is only as honorable as the people involved are. If you refuse to become involved in politics because it is a

crass and self-seeking business, then you must look to yourself whenever elected positions fall to these kinds of people. Find your "right" candidate and get ready to work.

Volunteers are needed at every level; enlist volunteer help; most people, who are not working in politics have never been asked to participate. They may not know that they are needed.

Campaign headquarters jobs are unlimited—typing, addressing letters, general clerical work such as filing and checking lists of potential voters. Errands must be run, campaign material must be delivered, trips to the post office and the printers have to be made. The energetic flexible volunteer who sees the importance of being ready for anything is an asset.

As fund raisers, few of us have the talent to raise money but all of us can put our membership with OMPAC. Through this political action committee, candidates are screened and support is given to those who favor medicine. Check with your husbands and see that both of you are PAC members.

Live up to your political responsibility. Find support and elect your candidate. □

Physician profile information is available from Medicare in certain limited situations. Medicare intermediaries and carriers have been instructed by HEW that they may release to an individual physician his recorded customary charge "upon his request, but only if (1) the request relates to a specific service furnished to a specific patient, (2) the physician has accepted the patient's assignment, and (3) the release of the customary charge would not disclose the prevailing charge level for that service. In non-assignment cases, the basis for the Medicare payment decision can not be disclosed to a physician, since he has established no legal interest in the payment relationship between Title XVIII and the beneficiary."

To clarify current wage-price guidelines that apply to physicians and other health professionals, the Committee on Health Service Industry is holding a series of regional seminars. The purpose of the meetings is to interpret regulations and give individuals and institutions an opportunity to raise questions about their individual situations. Two seminars are scheduled close to Oklahoma . . . October 19th-20th in Denver and October 25th-26th in Houston. For additional information write CHSI, 2025 M Street, Northwest, Washington, D. C. 20507 or call (202) 254-8718.

Acupuncture may be here to stay, but it's not going to be paid for. Medicare Part B Medical Insurance Intermediaries have been informed that Medicare will not reimburse for acupuncture when used as an anesthetic, analgesic, or for other therapeutic purposes "until pending scientific assessment of the technique has been completed." In the meantime the FDA is enforcing its "misbranding" provisions of the law to curtail the sudden influx of acupuncture needles. The misbranding provisions of the law say that medical devices can't be distributed without proper instructions for use. FDA officials say they don't want to regulate the practice of medicine, but they do feel a responsibility for seeing that the needles don't fall into the wrong hands.

A "hospital visit" warning has been issued by the AMA's Division of Medical Practice.

OSMA JOURNAL / *the last word*

Physicians who are unable to substantiate dates of hospital visits may be subjected to retroactive denial of Medicare benefits. Medicare requires that physicians be able to provide documentary evidence of hospital visits. In recent isolated incidences physicians have been directed to refund Medicare payments made more than a year ago. In each case the physicians had neglected to make an entry on the hospital record or to take other steps considered as acceptable proof by the Social Security Administration's Bureau of Health Insurance. A hospital rule that physicians are to visit their patients daily is not considered sufficient evidence that such visits were in fact made. Entries in physicians office records are not considered as "strong" evidence of the hospital record.

Pediatrics House Staff for Children's Memorial Hospital has a good public relations project which almost any medical society could use. The staff has furnished free physical examinations for various special schools around the Oklahoma City area. The OSMA has long had a policy of urging its members to serve as team physicians for high schools and junior highs. Another possibility would be physical examinations for little league football and baseball players. It takes a little time, but a dollar figure can not be placed on its public relations value.

All Oklahoma physicians have been surveyed by the OSMA in preparation for the printing of a new directory. Unlike past directories, the 1973 edition will list all physicians in the state, whether OSMA members or not. Projected for publication in early December, the new directory will give the physician's name, year of birth, school of graduation, year of graduation, specialty, office address, zip code, and office telephone number. A second section of the directory will list physicians with their specialty by city of practice. □

Librium® and (chlordiazepoxide HCl) concomitant use

Librium (chlordiazepoxide HCl) is used as adjunctive antianxiety therapy concomitantly with certain specific medications of other classes of drugs, such as cardiac glycosides, anti-hypertensive agents, diuretics, anticholinergics and antacids.

Antianxiety effectiveness: Demonstrated in a broad range of psychologic and physical dysfunctions; indicated when reassurance and counseling

are not enough and until, in the physician's judgment, anxiety has been reduced to tolerable, appropriate levels.

Effect on mental acuity: Usually minimal on proper maintenance dosage.

Safety: An excellent clinical record. In general use, the most common side effects reported have been drowsiness, ataxia and confusion, particularly in the elderly and debilitated.

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OCT 27 1972

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OF MEDICINE

**in relief of clinically
significant anxiety**

**Librium®
(chlordiazepoxide HCl)**

**5-mg, 10-mg, 25-mg capsules
up to 100 mg daily in
severe anxiety**

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Relief of anxiety and tension occurring alone or accompanying various disease states.

Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.

Precautions: In the elderly and debili-

tated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or over-sedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the

elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

Supplied: Librium® capsules containing 5 mg, 10 mg or 25 mg chlordiazepoxide HCl. Libritabs® tablets containing 5 mg, 10 mg or 25 mg chlordiazepoxide.



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Nutley, N.J. 07110

JOURNAL

BALCONY

Volume 65—Number 11—November 1972

OKLAHOMA STATE MEDICAL ASSOCIATION



The negative power of clinically significant anxiety
in angina pectoris...



This man feels he is living
on borrowed time.

During anginal attacks, patients may suffer intense apprehension. More frequently, however, they experience a continuing sense of less severe but nonetheless disproportionate anxiety.

Reduction of such clinically significant anxiety is important, since undue emotional stress may precipitate further anginal episodes.

Adjunctive Librium (chlordiazepoxide HCl) may be especially suitable for relief of clinically significant anxiety and emotional tension in anginal patients because of its generally prompt therapeutic effectiveness and wide margin of safety. In a recent double-blind randomized study, Librium (chlordiazepoxide HCl) was administered for relief of moderate anxiety in 20 anginal patients seen in office practice over a 20-week period. Symptoms of emotional distress related to anxiety were rated at base-line, one week, two weeks and monthly thereafter. Relief was obtained notably early in therapy. The clinical results demonstrated that Librium offers the coronary patient an antianxiety drug that, in the author's opinion, is both effective and safe. In general use, the most common side effects reported have been drowsiness, ataxia and confusion, particularly in the elderly and debilitated. (See summary of prescribing information.)*

Librium (chlordiazepoxide HCl) is used concomitantly with certain specific medications of other classes of drugs, such as cardiac glycosides, diuretics and antihypertensive agents, whenever anxiety is clinically significant. The drug should be discontinued after anxiety has been reduced to appropriate levels.

The positive power of
adjunctive
Librium®
(chlordiazepoxide HCl)
10-mg, 25-mg capsules
up to 100 mg daily
for moderate
to severe anxiety
accompanying angina pectoris

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Relief of anxiety and tension occurring alone or accompanying various disease states.

Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.

Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy. Supplied: Librium® Capsules containing 5 mg, 10 mg or 25 mg chlordiazepoxide HCl. Libritabs® Tablets containing 5 mg, 10 mg or 25 mg chlordiazepoxide.

*Levine, S.: "Angina Pectoris and Emotional Overlay," Scientific Exhibit presented at the Annual Meeting of the Maine Medical Association, Kennebunkport, Me., June 13-15, 1971.

A copy of the Levine study may be obtained from your Roche representative.



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The JOURNAL

NOVEMBER
1972
Vol. 65, No. 11

of the Oklahoma State Medical Association

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Pinworm therapy is often a family affair



Contraindications: History of hypersensitivity to thiabendazole.
Warnings: If hypersensitivity reactions occur, drug should be discontinued immediately and not resumed. Rarely, erythema multiforme has been associated with thiabendazole therapy; in severe cases (Stevens-Johnson syndrome), fatalities have occurred. Because CNS side effects may occur quite frequently, activities requiring mental alertness should be avoided. Safe use in pregnancy or lactation has not been established.
Precautions: Ideally, supportive therapy is indicated for anemic, dehydrated, or malnourished patients prior to initiation of anthelmintic therapy. In presence of hepatic or renal dysfunction,

patients should be carefully monitored.

Adverse Reactions: Most frequently encountered are anorexia, nausea, vomiting, and dizziness. Less frequently, diarrhea, epigastric distress, pruritus, weariness, drowsiness, giddiness, and headache have occurred. Rarely, tinnitus, hyperirritability, numbness, abnormal sensation in eyes, blurring of vision, xanthopsia; hypotension, collapse; enuresis; transient rise in cephalin flocculation and SGOT; perianal rash, cholestasis and parenchymal liver damage; hyperglycemia; transient leukopenia; malodor of the urine, crystalluria, hematuria; appearance of live *Ascaris* in the mouth and nose. Hypersensitivity reactions

A New Dosage Form:

Chewable Tablets 500 mg Mintezol® (THIABENDAZOLE | MSD)



so easy to take
everyone in the family
can keep to the
regimen you prescribe

include: fever, facial flush, chills, conjunctival injection, angioedema, anaphylaxis, skin rashes, erythema multiforme (including Stevens-Johnson syndrome), and lymphadenopathy. **Supplied:** Chewable tablets, containing 500 mg thiabendazole, in boxes of 36, strip packaged, individually foil wrapped; Suspension, containing 500 mg thiabendazole per 5 cc, in bottles of 120 cc.

For more detailed information, consult your MSD representative or see full prescribing information. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486

INDICATION | DOSAGE SCHEDULE

MINTEZOL® (Thiabendazole, MSD) has demonstrated effectiveness against a broad spectrum of nematode infections. Dosages are weight related. For your convenience, the information in the weight-dose chart below is included in the full prescribing information and in the 1973 edition of PDR.

The recommended maximum daily dose of MINTEZOL is 3 g (6 tablets).

MINTEZOL should be given after meals if possible. Dietary restriction, complementary medications, and cleansing enemas are not needed.

The usual dosage schedule for all conditions is two doses per day. The size of the dose is determined by the patient's weight.

Weight-dose chart:

WEIGHT (lb)	EACH DOSE (g)	TABLETS
25	0.25	½
50	0.5	1
75	0.75	1½
100	1.0	2
125	1.25	2½
150 & over	1.5	3

The regimen for each indication follows:

INDICATION	REGIMEN	COMMENTS
Pinworm disease	Two doses per day for 1 day. Repeat in 7 days. This regimen is designed to reduce the risk of reinfection.	If this is not practical, give 2 doses per day for 2 successive days.
Threadworm,* large roundworm,* hookworm,* and whipworm* disease	Two doses per day for 2 successive days.	A single dose of 20 mg/lb or 50 mg/kg may be employed as an alternative schedule, but a higher incidence of side effects should be expected.
Creeping eruption	Two doses per day for 2 successive days.	If active lesions are still present 2 days after completion of therapy, a second course is recommended.
Symptoms of trichinosis* during the invasive phase of the disease	Two doses per day for 2 to 4 successive days according to the response of the patient.	The optimal dosage for the treatment of trichinosis has not been established.

*Clinical experience with thiabendazole for treatment of each of these conditions in children weighing less than 30 lb has been limited.

When irritable colon feels like this



... **KINESED®** provides more complete relief.

Gastroenteritis, colitis, gastritis or duodenitis can produce spasm or hypermotility, gas distention and discomfort. But Kinesed can provide a balanced formulation to relieve these symptoms:

- ☐ belladonna alkaloids—for the hyperactive bowel
- ☐ simethicone—for accompanying distention and pain due to gas
- ☐ phenobarbital—for associated anxiety and tension

Contraindications: Hypersensitivity to barbiturates or belladonna alkaloids, glaucoma, advanced renal or hepatic disease.

Precautions: Administer with caution to patients with incipient glaucoma, bladder neck obstruction or urinary bladder atony. Prolonged use of barbiturates may be habit-forming.

Side effects: Blurred vision, dry mouth, dysuria, and other

atropine-like side effects may occur at high doses, but are only rarely noted at recommended dosages.

Dosage: Adults: One or two tablets three or four times daily. Dosage can be adjusted depending on diagnosis and severity of symptoms.

Children 2 to 12 years: One-half or one tablet three or four times daily. Tablets may be chewed or swallowed with liquids.



STUART PHARMACEUTICALS | Division of ICI America Inc. | Wilmington, Del. 19899

(from the Greek *kinetikos*,
to move,
and the Latin *sedatus*,
to calm)

KINESED®
antispasmodic/sedative/antiflatulent

Each *chewable tablet* contains: 16 mg. phenobarbital (warning: may be habit-forming); 0.1 mg. hyoscyamine sulfate; 0.02 mg. atropine sulfate; 0.007 mg. scopolamine hydrobromide; 40 mg. simethicone.

Chuckwalla (*Sauromalus obesus*):
This southwestern desert lizard seeks
shelter in crevices of rocks.
When attempts are made to probe him
from his niche, he gulps air
until his abdomen is distended up to
sixty per cent over its normal size...
thus wedging himself tightly
in place and preventing capture.

What it means to live and work in Tipton County, Tennessee

**Persons who are white and
over 40 have one chance in four
of having solar keratoses...
which may be premalignant**

An epidemiologic study* conducted in Tipton County, Tennessee, revealed that 28.5% of white persons over 40 had solar keratoses; most had multiple lesions. Cluster sampling projected an estimated prevalence of 32.5% for white males and 19.5% for white females.

Though this is an unusually high percentage of affected persons, these lesions can occur in any white population, wherever people work or play out of doors.

**Prevalence of solar keratoses in white persons
over 40 in Tipton County, Tennessee**

Female	159	44
Male	117	66

☐ Persons without solar keratoses ☒ Persons with solar keratoses

*Data on file, Hoffmann-La Roche Inc., Nutley, New Jersey.



Solar, actinic, senile keratoses

Called by many names, the typical lesion is flat or slightly elevated, brownish or reddish in color, papular, dry, adherent, rough, sharply defined; usually multiple lesions, chiefly on exposed portions of the skin.

Sequence/selectivity of response

Erythema in areas of lesions may begin after several days of therapy; height of reaction (only in affected areas)* usually occurs within two weeks, declining after discontinuation of therapy. Since this response is so predictable, lesions that do not respond should be biopsied to rule out the presence of a frank neoplasm.

Cosmetic results

Cosmetic results are highly favorable. Incidence of scarring is low—important with multiple facial lesions. Efudex should be applied with care near the eyes, nose and mouth.

5% cream—a Roche exclusive

Only Roche formulates the 5% cream... high in patient acceptability... high in clinical efficacy, especially for lesions of hands and forearms... economical.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Multiple actinic or solar keratoses.

Contraindications: Patients with known hypersensitivity to any of its components.

Warnings: If occlusive dressing used, may increase inflammatory reactions in adjacent normal skin. Avoid prolonged exposure to ultraviolet rays. Safe use in pregnancy not established.

Precautions: If applied with fingers, wash hands immediately. Apply with care near eyes, nose and mouth. Lesions failing to respond or recurring should be biopsied.

Adverse Reactions: Local—pain, pruritus, hyperpigmentation and burning at application site most frequent; also dermatitis, scarring, soreness and tenderness. Also reported—insomnia, stomatitis, suppuration, scaling, swelling, irritability, medicinal taste, photosensitivity, lacrimation, leukocytosis, thrombocytopenia, toxic granulation and eosinophilia.

Dosage and Administration: Apply sufficient quantity to cover lesion twice daily with nonmetal applicator or suitable glove. Usual duration of therapy is 2 to 4 weeks.

How Supplied: Solution, 10-ml drop dispensers—containing 2% or 5% fluorouracil on a weight/weight basis, compounded with propylene glycol, tris(hydroxymethyl)amino-methane, hydroxypropyl cellulose, parabens (methyl and propyl) and disodium edetate.

Cream, 25-Gm tubes—containing 5% fluorouracil in a vanishing cream base consisting of white petrolatum, stearyl alcohol, propylene glycol, polysorbate 60 and parabens (methyl and propyl).

an alternative to
conventional therapy
Efudex[®]
(fluorouracil)
cream/solution



Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, N.J. 07110





Diagnosis: Problem Drinking Rx: La Hacienda

The staff of La Hacienda, in Hunt, Texas, has a very practical definition of the problem drinker. To them, a person is having difficulties when he (or she) discovers that alcohol interferes with his (or her) private or professional life. For such people, La Hacienda offers a much-needed private treatment facility for alcoholism.

La Hacienda: Broad Spectrum Treatment

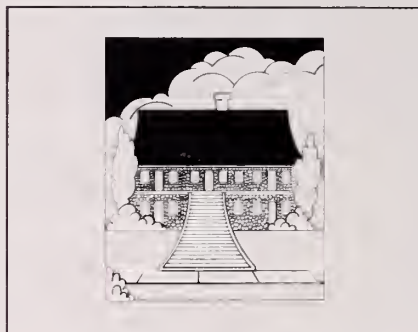
Until La Hacienda, those willing and able to pay for private treatment of drinking problems have had few places to go.

La Hacienda offers a broad-spectrum program designed to change the life style of the problem drinker. Only by re-structuring his life is any long-term recovery possible.

**La Hacienda:
Residential Treatment Program**
Patients check into La Hacienda for an individually determined length of time, normally four weeks. Dur-

ing this period, they will re-learn a more healthful life style, through habit, attitude and goal training. Techniques for this period of reflection include individual, group and family psychiatric and psychological therapy, as well as complete medical services.

The program is administered by



an experienced full-time medical and psychological staff.

La Hacienda: Place To Relax And Re-Learn

While involved in therapy, the patient can enjoy the complete recreational facilities of the treatment center. These include swim-

ming pool, golf course, tennis and riding facilities plus outdoor sports on the Guadalupe River.

Facilities for husband and wife are available and each patient is housed in a motel-style room.

Comfortable dining facilities and exceptional cuisine are featured. Social and religious activities are regularly scheduled.

Thus, the patient has an opportunity to relax within a pleasant environment while seeking a solution to his problem.

La Hacienda: A Shared Concern

Consultations between the resident physician and the referral source are an integral part of the program. Clients are returned to their community with appropriate follow-up information and recommendations.

La Hacienda: What To Do

Please use the coupon below to obtain more information on the detailed program.



La Hacienda Hunt, Texas 78024

Telephone 512-238-4222

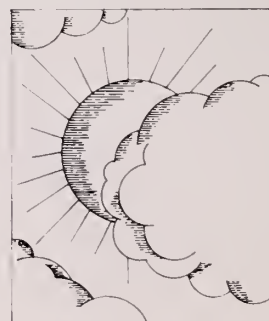
OM

Please send me more information on the facilities, programs of treatment, and cost at La Hacienda. I understand there is no obligation.

Name _____

Address _____

City _____ State _____ Zip _____



"The history of science, and in particular the history of medicine is the history of man's reactions to the truth, the history of the gradual revelation of truth, the history of the gradual liberation of our minds from darkness and prejudice."

—George Sarton, from "The History of Medicine Versus the History of Art"

**Are combination drug
products useful in treatment
involving concomitant use
of two or more drugs?**

Opinion

**Results of a questionnaire to
7,000 physicians:**

62.9%

**Believe combination drug
products are useful.**

13.8%

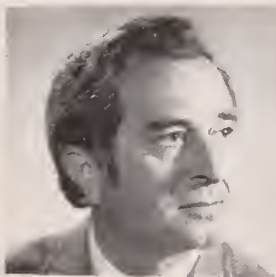
**Do not believe combination drug
products are useful.**

Are combination drug products useful in treatment involving concomitant use of two or more drugs?

Opinion & Dialogue

Doctor of Medicine

Louis Lasagna, M.D.
Professor and Chairman
Department of
Pharmacology & Toxicology
University of Rochester
School of Medicine
and Dentistry



Obviously, many drugs are given concomitantly. Whether it makes sense to combine medications in one preparation, be it capsule, tablet, or liquid, is a question that can be answered only by examining the advantages and disadvantages in the individual case.

Among the advantages is, first of all, convenience. The more medications that are taken concurrently and the more complicated the directions, the less likely the patient is to take medications accurately. From the standpoint of convenience and accuracy, and economy as well, you can make an important case for putting medications together in one preparation, as long as they are compatible.

By the same token, when you prescribe a properly tested and rational combination, you should have less worry about pharmaceutical or pharmacological compatibility — and about reasonable dosage ratios as well. Compatibility of the formulation should be demonstrated in the laboratory and clinic before the product is available for prescription—which is more than can usually be said for

the physician's own spontaneous creations. And, the dosage ratios employed in rational precompounded combinations are designed to meet the needs of substantial numbers of "typical" patients.

There is no doubt that many "atypical" patients are to be found, and for them the prefabricated combination must be rejected. But that hardly argues for eliminating rational combinations from the market. Think, for example, of the problems that would arise if the components of widely accepted combinations, like the oral contraceptives and the diuretic-antihypertensives, always had to be prescribed, purchased and ingested separately.

One disadvantage that comes to mind is some doctors' unawareness of the ingredients a given combination contains. For example, a doctor might know that a patient is allergic to aspirin but forget that a certain analgesic mixture, which he knows only by its trade name, contains aspirin. His prescription, then, causes considerable discomfort, to say the least. This problem is a function of physician education, rather than of combination therapy as such. Improving doctors' knowledge about all medicaments they prescribe is a problem that deserves tackling on its own.

Another accusation leveled at combination drugs is that they encourage sloppiness of diagnosis and treatment. In many cases, however, a combination may prove to be the most effective choice. A good ex-

ample of the usefulness of combinations appears in a recent article in the *Journal of Chronic Diseases* on the efficacy and side effects of an antihypertensive containing three ingredients, in which the track records of the combination drug and the individual ingredients were compared. Interestingly enough, whether the drugs were given individually or together, incidence and severity of side effects were the same. But blood pressure control was invariably better when the drugs were taken in one combination tablet than when they were taken separately (in "titratable" dosage) or in two or three different tablets.

Deciding which combinations constitute rational therapy obviously leads to a discussion of who is to determine which should be used and which should not. Realistically, I think combinations should be evaluated somewhat differently if they are old and established or new and untried.

In today's regulatory atmosphere, there is no possibility of a new combination being put on the market without a substantial amount of acceptable evidence in the form of controlled trials that show it to be safe and efficacious. On the other hand, I believe a different set of standards should apply to combination preparations that have been around for a long time. In other words, physician acceptance over a long period should be given some weight as evidence of the efficacy and safety of these drugs.

The FDA, however, does not seem to share this attitude. It often requires, for these older products, controlled trials that will monopolize the time of already overtired investiga-

tors and cost a great deal of money. I wish we could agree on a "grandfather clause" approach to preparations that have been in use for a number of years and that have an apparently satisfactory track record.

For example, I think some of the antibiotic combinations that were taken off the market by the FDA performed quite well. I am thinking particularly of penicillin-streptomycin combinations that patients—especially surgical patients—were given in one injection. This made for less discomfort for the patient, less demand on nurses' time, and fewer opportunities for dosage errors. To take such a preparation off the market doesn't seem to be good medicine, unless actual usage showed a great deal of harm from the injections (rather than the proper use) of the combination.

The point that should be emphasized is that there are both rational and irrational combinations. The real question is, who should determine which is which? Obviously, the FDA must play a major role in making this determination. In fact, I don't think it can avoid taking the ultimate responsibility, but it should enlist the help of outside physicians and experts in assessing the evidence and in making the ultimate decision.

Maker of Medicine

W. Clarke Wescoe, M.D.
President
Winthrop Laboratories



If two medications are used effectively to treat a certain condition, and it is known that they are compatible, it clearly is useful and convenient to provide them in one dosage form. It would make no sense, in fact it would be pedantic, to insist they always be prescribed separately. To avoid the appearance of pedantry, the "expert" decries the combination because it is a fixed dosage form. When the "expert" invokes the concept of fixed dosage form he obscures the fact that single-ingredient pharmaceutical preparations are also fixed dosage forms. By a singular semantic exercise he implies a pejorative meaning to the term "fixed dose" only when he uses it with respect to combinations. What is ignored is the simple fact that only in the rarest of circumstances does any physician attempt to titrate an exact therapeutic response in his patient. It is quite possible that some aches and pains will respond to 500 mg. of aspirin yet that fact does not militate against the usual dose being 650 mg.

The other semantic ploy often called into play is to describe a combination product as rational or irrational.

Take antibiotic mixtures, the source of much of the criticism generated against

combinations generally. Obviously, no one should be exposed willy-nilly to the potential side effects of two or three antibiotics when only one is needed. At the same time there are cases where it is prudent to prescribe more than one. The clinician is the judge in these circumstances, as he should be.

There is no clear definition of the word rational. Most persons, I suppose, would find it synonymous with reasonable, but in many circumstances it may best be defined as the opinion of those in power at the moment.

Other factors govern combination therapy, not the least of which has been its broad use by practicing physicians anxious to achieve convenience in prescribing, to reduce medication error, and to save money for their patients. Combinations clearly have met the test on all three counts.

I have been impressed by studies showing that the rate of error climbs markedly with the number of medications to be taken, even with sophisticated patients. When medically justified, therefore, this factor alone supports the logic of combination therapy.

The cost argument for combinations appears to be irrefutable. In 1971, R. A. Gosselin studied the 71 combination products (excluding oral contraceptives) among the 200 most prescribed drugs. The study found that if all 71 products were discontinued, and if each ingredient in these combinations were prescribed separately, the price of medicines to patients would jump by \$443.2 million on a national basis! At a time when the cost of medical care is under so much fire, it would be nonsensical to boost costs without clearly irre-

futable medical reasons.

The part played by government on this question, of course, is fundamental. The FDA should play a role in determining which combinations are reasonable. That role, as defined by law and regulation, is to ensure that any medication on the market is safe and effective in line with its label claims. Certainly combinations are entitled to as much consideration as single entities—neither more nor less. So long as the addition of one drug to another does not make either less safe, or less effective, so long as they are compatible in a formulation, we have a reasonable product. It makes no sense to recommend the use of two products for certain conditions and to deny their being combined in a single form. An unhappy side effect of the problem concerns the efficacy panel discussions of many products submitted for review. The term "effective, but" has been freely interpreted to mean "ineffective" in toto, regardless of the merit of the individual drugs. This interpretation has placed numerous useful combination products in needless jeopardy.

In reading the actual reports of the review panels, it seems clear that some of the ratings were based less on scientific research and clinical observation than on the "informed" opinions of the panelists. These "informed" opinions were accepted at face value, while

the "informed" opinions of others who had used the products were rejected. All of this put combination products into a sort of scientific never-never land.

It should be kept in mind by all, government as well as others involved in our health care system, that advances in therapy are seldom made in leaps and bounds but rather by small painstaking steps—and that some of these steps have resulted from research in combination drugs as well as with single entities. Given the near-infinite biologic variation in patient response, this is hardly surprising to clinicians. It should not be to regulatory agencies either.

In the end, the practicing physician is in the best position to decide if a particular combination makes sense. Such a decision should not be made exclusively by those whose responsibility for continuing clinical care is limited. Clinicians are the best judges of efficacy because the ultimate proof of any product's effectiveness is acceptance by physicians who have observed its actions in patients over time. The corollary statement may be made about over-the-counter medicines, which would not long survive if they failed to afford the relief the user anticipates. That the antihistamine in a "cold" remedy may not *always* be necessary is no reason to proscribe the combination generally.

Opinion & Dialogue

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The Ultimate Crime

IF WE ARE to judge from the support given our Health Sciences Center, it is clearly evident that one or more of the following statements is true:

- The people of the State of Oklahoma do not want to train more physicians, nurses or other health professionals.

- The people of the State of Oklahoma would like to train more health professionals but do not want to deprive the higher priority programs such as road building and welfare assistance in order to do so.

- The people of Oklahoma recognize the need for and want to train more health professionals but they have failed to express effectively such convictions to their elected officials.

- The people of Oklahoma want to support the efforts of the Health Sciences Center, and have made their position known to their legislators, but are being misrepresented or ignored by their political spokesmen.

- The people of the State of Oklahoma and their elected representatives honestly believe that our support of the Health Sciences Center is adequate for our needs and it is merely poor management of the Center's funds which creates its chronic financial crisis.

I suppose that there are those who believe, wholly, only one of the above statements. Surely there are many more who believe, partially, several of them. The great tragedy is, I fear, that most Oklahomans are entirely unaware that a financial crisis is about to destroy the status, if not the very

existence of the only facility in the state which trains physicians, dentists and several other kinds of health care professionals. Ironically, many Oklahoma communities are exercising great efforts to encourage graduates of the Center to become their neighbors. Some of these cities and towns have spent considerable sums of money providing health care facilities and attempting to recruit the personnel necessary to staff and operate them, apparently oblivious of the truth that their principal resource is *in extremis*.

Common to all the statements above is the disheartening fact that, as a state, we are not supporting our Health Sciences Center, one of the most vital institutions within our boundaries. While politicians decry a crisis in health care, while community leaders bemoan shortages of physicians, dentists, and nurses, while the medical profession is being castigated for its self-serving attitude, we steadfastly refuse to assume responsibility for our problems or their solutions.

If it is so in Oklahoma, it must be so in many other states; no one gives a damn whether or not health care training facilities survive or die. And if this is true, our national concern about health care is as phony as a seven-dollar bill.

And the ultimate crime? . . . To bankrupt the most powerful nation on earth, through the enactment of a poorly conceived, badly designed, bureaucrat-dominated, largely unnecessary, generally unwanted and universally misunderstood program of compulsory health insurance . . . for a thoroughly phony cause.—MRJ □



HR1 went through the House (305-1) and the Senate (61-0) like a dose of salts and was passed on to the President ten days before the national election. I had some fleeting hope that the President might veto the bill due to the astronomical

costs and the many parasitic riders attached. But, alas, Nixon is a political animal and it would have been political suicide to veto a bill carrying increased benefits for everyone on Social Security one week before election.

This Bill compounds the fact that the greatest involuntary luxury of the American working man is a spendthrift Federal Government. Government waste costs the average family more each year in taxes and Social Security deductions than its medical care costs. The Federales are experts at placing the blame elsewhere for the squeeze on the working man.

Aside from the enormous costs of HR1, there are some very unsavory riders intimately related to health care:

1. Payment for optometrists' services under Medicaid.
2. Authorization of the Secretary to set costs.
3. Encourage formation of Health Maintenance Organizations.
4. Authorization of the Secretary to terminate payments to certain providers.
5. More utilization review requirements.

6. Review of unnecessary admissions to hospital.
7. The Secretary of HEW can determine proficiency of health personnel, even in absence of formal education, and allow them to provide services under Medicare.
8. Penalties of \$10,000 and one year imprisonment for certain violations.
9. Enters into an agreement with the Joint Commission for Accreditation of Hospitals to cut off Medicare payments to hospitals not meeting JCAH requirements.
10. Extension of Medicare to include chiropractic services.
11. Professional Standards Review of a highly restrictive nature to be left originally to organizations representing substantial numbers of physicians, but after 1975 the Secretary of HEW can contract with other groups (Blue Cross or Welfare Department for example.)

This bill in its entirety should be required reading for every physician since it is so sure to alter unfavorably, I believe, American medicine of the future. When Federal regulators finish with HR1 medical care as it exists today in the United States will be practically nonexistent.

Our only salvation is to ban together as nonparticipants in this cruel hoax on the American people. If we refuse to take assignment, divorce ourselves from any third parties whatever, and deal only with our patients, then and only then can we remain free.

SR. McCampbell, MD

Rifampin—An Important New Antituberculous Agent

ROBERT BINGAMAN, MD
HAJIME YOSHIOKA, MD
HARRIS D. RILEY, JR., MD

Rifampin, a new antibiotic, is highly effective against the tubercle bacillus and against certain other pathogens of human disease. It offers an important new advance in the management of tuberculosis.

RIFAMPIN IS A new semi-synthetic antibiotic which is highly effective against the tubercle bacillus. Rifampin is also active *in vitro* and *in vivo* against some strains of gram-positive cocci, and *in vitro* against gonococci and meningococci. Its activity is less and more variable against many common gram-negative bacilli. It also possesses chemotherapeutic activity against certain viruses.

HISTORY AND DESCRIPTION

Rifampin is a semi-synthetic antibiotic belonging to the rifamycin group of antibi-

otics. It is also known as rifampicin (official nomenclature of WHO) and rifamycin AMP in the European literature. Various natural rifamycins were isolated in 1957 from the fermentation broth of *Streptomyces mediterranei* and were further developed by Italian workers.¹ The first member of this group available for clinical use was rifamycin SV, which showed high activity *in vitro* against gram-positive organisms and my-

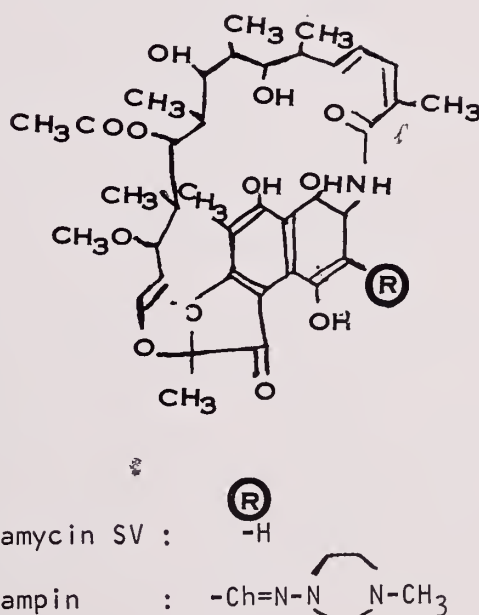


FIGURE 1
STRUCTURAL FORMULA OF RIFAMPIN

From the Department of Pediatrics and the Children's Memorial Hospital, University of Oklahoma Health Sciences Center, Oklahoma City, Oklahoma.

cobacteria. This antibiotic was effective only when administered parenterally, and it was quickly concentrated in the liver and excreted in the bile. As a result, the concentrations attained in blood and tissues were low, so that its *in vivo* activity, especially against tubercle bacilli, was disappointing.

Rifampin was derived semi-synthetically from rifamycin SV. As shown in Figure 1, its chemical structure is a 3- (-4-methyl-1 piperazinyl-iminomethyl) derivative of rifamycin SV.² The advantages of rifampin over rifamycin SV are its good absorption after oral administration, its high concentration in blood and its slower excretion. In the United States it is currently distributed by both Dow Chemical Company and Ciba Pharmaceutical Company for investigation under the names of Rifadin® and Rimactane®, respectively. Rifamide is a parenteral drug closely related to rifampin, but it is not presently available in the United States.

ANTIBIOTIC ACTION

It is believed that rifampin acts on susceptible organisms by making a stable complex with the DNA-dependent RNA polymerase, and then preventing the initiation of the formation of messenger RNA.^{3,4} Unlike other antibiotics which inhibit this enzyme—such as actinomycin, mithramycin, chromomycin and nogalamycin—rifampin does not interfere with the endogenous RNA polymerase of mammalian cells and is therefore much less toxic.⁵ Its action on bacterial cells is believed to be bactericidal.^{6,7} The *in vitro* antibacterial activity of rifampin against some laboratory strains is shown in Table 1.⁸ The minimum inhibitory concentration (MIC) against most strains of *Mycobacterium tuberculosis* is about 0.5 mcg/ml. Natural resistance of tubercle bacilli to rifampin is reported to occur at a frequency of one to 10⁶-10⁸ organisms whereas resistance to isoniazid occurs one to 10⁴-10⁶.^{2,7} Tubercle bacilli resistant to isoniazid (INH) and other antituberculosis drugs do not demonstrate cross resistance to rifampin.^{8,9} Some investigators have demonstrated higher minimum inhibitory dilutions (MID) of

TABLE I
IN VITRO ANTIBACTERIAL ACTIVITY OF RIFAMPICIN ON LABORATORY STRAINS OF BACTERIA

ORGANISM	MIC (MCG/ML)
<i>Staphylococcus aureus</i> ATCC6338	0.002
<i>Streptococcus fecalis</i> ATCC10541	0.01
<i>Streptococcus hemolyticus</i> C203	0.02
<i>Diplococcus pneumoniae</i> UC41	0.01
<i>Clostridium perfriugens</i> ATCC3626	0.002
<i>Hemophilus influenzae</i> ATCC9334	0.02
<i>Neisseria gonorrhoeae</i> ATCC9826	0.02
<i>Pseudomonas aeruginosa</i> ATCC10145	10.
<i>E. coli</i> ATCC10336	1
<i>Aerobacter aerogenes</i> ATCC8724	5
<i>Klebsiella pneumoniae</i> ATCC10031	5
<i>Proteus vulgaris</i> ATCC881	5
<i>Salmonella typhi</i> M507	5
<i>Shigella sonnei</i> ATCC9290	10
<i>Mycobacterium tuberculosis</i> ATCC9360	0.5
<i>Candida albicans</i>	> 100

serum with rifampin than with INH.⁶ Combination of rifampin and INH consistently resulted in high tissue sterilization of bacilli in experimental tuberculosis.¹⁰

Rifampin has also been shown to be effective against viruses, mainly DNA-viruses, which utilize their own DNA-dependent RNA polymerase for growth. RNA viruses, which make an RNA replicase, have not been found to be sensitive. Thus, rifampin has activity against vaccinia, cowpox, adenovirus, tra-

Hajime Yoshioka, MD, was graduated from Hokkaido University, Sapporo, Japan in 1953. Doctor Yoshioka is currently Assistant Professor of Pediatrics, Hokkaido University.

Robert W. Bingaman, MD, was graduated from the Oklahoma Health Sciences Center in 1972. He is currently serving a surgical internship at St. Frances Hospital, Wichita, Kansas.

Harris D. Riley, Jr., MD, was graduated from Vanderbilt University School of Medicine in 1948. He is now Professor of Pediatrics and Pediatrician-in-Chief of the Children's Memorial Hospital University of Oklahoma Health Sciences Center in Oklahoma City. Certified by the American Board of Pediatrics, Doctor Riley is a member of the Society for Pediatric Research, the American Pediatric Society and the Infectious Disease Society of America.

choma virus and Roussarcoma virus in tissue culture.⁵ Antitumor activity has also been reported by some investigators.¹¹

PHARMACOLOGY^{2, 12, 13}

Rifampin is well absorbed from the gastrointestinal tract when taken on an empty stomach, and peak plasma levels generally occur two and four hours after oral administration of a 600 mg dose. The average peak plasma value is 7 µg/ml (range 4 to 32 µg/ml). Effective blood levels are still found nine to 12 hours following a single oral administration of 450 mg or more. The biological half-life of rifampin in man is about three hours. The drug is eliminated primarily as the deacetylated metabolite in the bile and to a lesser degree in the urine. Enterohepatic recirculation might contribute to lasting blood levels.

While rifampin is a large and fat-soluble molecule, INH is a small and water-soluble molecule and its MIC for *M. tuberculosis* is 0.05 to 0.2 mcg/ml.^{8, 14} The two drugs are not related chemically and their modes of action are quite different.¹⁵ INH apparently acts through the inhibition of DNA synthesis, whereas rifampin inhibits RNA synthesis.⁸ The pharmacologic characteristics of rifampin and INH are compared in Table 2.

DRUG INTERACTION

The mean plasma half-life of rifampin was decreased in 12 patients who were receiving isoniazid concomitantly and who were slow inactivators of this drug.¹⁵ The concomitant administration of aminosali-

cyclic acid may delay absorption of rifampin and adequate serum levels may not be attained. Therefore, these agents should be given separately at intervals of eight to 12 hours.¹⁶ Adequate serum levels also may not be attained if barbiturates are administered concomitantly.¹²

Rifampin inhibits the activity of the coumarin anticoagulants. Patients receiving the two agents concomitantly should have daily prothrombin times carried out until the effective dose of the anticoagulant is established.¹²

TOXICITY AND ADVERSE REACTIONS

Untoward effects with the use of rifampin generally occur infrequently, but the experience is not sufficiently great to pass final judgment. Transient abnormalities in results of liver function tests (i.e., elevation in serum bilirubin, alkaline phosphatase and transaminase levels) during rifampin treatment have been observed.^{12, 17, 18} Jaundice has also been reported. It is likely that the drug interferes with the hepatic uptake of bilirubin, and that an excess of unconjugated bilirubin in the blood, not liver necrosis, is responsible for the jaundice that sometimes occurs. Several fatalities associated with jaundice have occurred in patients with pre-existing liver disease or in those who had taken other hepatotoxic drug concomitantly.¹⁹ Therefore, rifampin should be used cautiously in patients with hepatic disease, particularly when it is given in combination with other drugs.^{7, 12} Periodic liver function tests should be done. Transient leukopenia¹⁸ and thrombocytopenia with positive Coombs' test have been noted.²⁰ Transient hearing defects have also been observed.²¹

Confusion, lassitude, difficulty in concentration, ataxia, dizziness, fever, painful extremities, numbness, skin rash and eosinophilia have also been observed.^{12, 18} Gastrointestinal effects such as nausea, vomiting, diarrhea are reported and sometimes they are severe enough to warrant discontinuing use of rifampin in some patients.¹² Teratogenic effects were noted in animals receiving large doses. The expected benefits should be weighed against the possible hazards if rifampin is used in women who are pregnant or are likely to become pregnant.¹² Patients

TABLE 2
PHARMACOLOGIC CHARACTERISTICS OF
RIFAMPIN AND ISONIAZID

After a single oral dose of 10 mg/kg	Rifampin	Isoniazid
. Peak levels (hour)	2 - 4	2
. Peak serum concentration (mcg/ml)	7 - 32	7.6* 8.9**
. Biologic half-life (hour)	2 - 3	1.3* 3.0**

*Rapid inactivator

**Slow inactivator¹⁵

taking rifampin should be informed that urine, feces, saliva, sputum, tears, and sweat may be orange-red in color.

RECOMMENDED USAGE

The principal usefulness of rifampin is in the treatment of pulmonary tuberculosis, and the results to date have been impressive. In treatment of infections due to *M. tuberculosis*, rifampin should be administered with other antituberculosis agents (e.g., INH, ethambutol, streptomycin) selected on the basis of bacterial susceptibility tests and knowledge that the patient had not received these agents previously. Favorite therapeutic results in clinical trials have been reported with the combination of rifampin with other antituberculosis drugs (e.g., INH, streptomycin or ethambutol).^{17, 18, 22} A significant segment of the evidence of rifampin efficacy in man has come from reports of treatment of far advanced, multiple-drug-resistant cases.^{7, 22} Resistant organisms may emerge if other antituberculosis drugs are not given concomitantly. When combined with either isoniazid, ethambutol, or streptomycin, rifampin has been very effective in initial therapy, but it has been used mainly in the retreatment of patients in whom the development of resistance has prevented successful initial therapy with combinations of other antituberculosis drugs. Use of the combination of rifampin and other drugs has often resulted in bacteriologic, radiologic, and clinical improvement in this difficult group of patients, and sputum conversion has sometimes exceeded 90 per cent.²¹ The routine use of rifampicin in the *initial* treatment of pulmonary tuberculosis is not currently recommended because the results with other agents have been successful and the cost of treatment with rifampin is high. However, rifampin may be given initially for patients who develop serious untoward effects from other drugs or for those in whom the causative organisms are resistant to other agents.¹² In far-advanced multiple resistant cases or in contacts of patients with resistant strains, rifampin is considered to be the drug of first choice.^{12, 17, 22} It has also been found useful in extra-pulmonary tuberculosis.²¹ Thus, rifampin appears to be one of the most effective

antituberculosis chemotherapeutic agents.

It also may prove useful to treat infections caused by *M. kansasii* and other atypical mycobacteria sensitive to it. It has been used investigationaly in the treatment of leprosy.¹² Rifampin is also indicated for the short-term treatment of asymptomatic carriers of *Neisseria meningitidis*.²³ The organisms in about 15 per cent of the carriers are resistant to rifampin as well as to other agents.²¹ It should be given only when the risk of meningitis is high, and is not recommended for the treatment of meningococcal infections.

Preliminary studies suggest that the usefulness of rifampin in the treatment of other infections will be limited by the rapidity with which various organisms develop resistance to it.

DOSAGE

For adult patients with pulmonary tuberculosis, 600 mg in a single daily, oral dose is recommended. In children over five years of age, a single oral dose of 10 to 20 mg/kg of body weight per day (not exceeding 600 mg) is recommended. No dosage information is available for children under five years. The drug should be given on an empty stomach, either one hour before or two hours after eating. As mentioned above, one or more other antituberculous agents should be administered concurrently. Rifampin should be continued for one to two years after consistent negative cultures of tubercle bacilli have been obtained, as determined by monthly or bimonthly cultures.^{12, 21}

In treatment of meningococcal carriers, the drug is given at least two hours before eating in the same dosage as for pulmonary tuberculosis for four consecutive days.^{12, 23}

Rifampin is much more costly than other primary antituberculosis agents; the cost to a hospital pharmacy for six months treatment for an adult is about \$360, but more rapid conversion of the sputum may more than compensate by reducing the total cost of hospitalization.²⁴

ACKNOWLEDGMENT

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P.O. Box 26901, Oklahoma City, Oklahoma 73190

CORRECTION

In the August, 1972 issue of the OSMA Journal on page 337 the biographical information on author Robert E. L. Johnson, Jr., DR, PH, should have read as follows: "(he) graduated from the School of Health, University of Oklahoma, Department of Human Ecology in 1971. He is now Practicum Coordinator for the Mental Health Associate degree program, Northern Oklahoma College at the Bi-State Mental Health Foundation. He is a member of the Oklahoma Health and Welfare Association, the American Group Psychotherapy Association and the National Association of Social Workers."

Diabetic Retinopathy, II

C. P. WILKINSON, MD

The treatment of diabetic retinopathy remains far from satisfactory, although newer techniques may improve the chances of success.

TREATMENT

AS NOTED in the first portion of this paper, the advances in the therapy of diabetes mellitus have resulted in an increased incidence of retinopathy, and the relative lack of success to date in dealing with these retinal vascular complications has resulted in increased numbers of blind diabetics. Many forms of therapy have been attempted to slow down the rates of appearance and progression of the retinopathy and to avert the threat of blindness. Some of these, such as vitamins, anabolic steroids, and radiation therapy appear to be of no value. Others, such as diabetic control, pituitary ablation, and photocoagulation may well influence the course of diabetic retinopathy, although the value of such approaches remains controversial.

The relation between the control of dia-

betes and the onset and severity of retinopathy is debatable, in spite of the fact that several hundred articles on the subject have appeared in the last 35 years. Such studies are admittedly difficult and nearly all have been retrospective in nature. There are indications that excellent control of diabetes may exert a beneficial effect on retinopathy by delaying the onset of fundus changes.¹ There is much less evidence to date that control has a significant effect upon established retinopathy, although a recent prospective study with a very short followup period suggested that the progression of background lesions was retarded when control was "very good."² Although the control of diabetes may have a positive effect on diabetic retinopathy, this influence is probably minimal, for the vast majority of even exquisitely controlled diabetics ultimately develop retinal vascular lesions, and better methods of managing diabetic retinopathy are certainly needed.

A second method of treating diabetic retinopathy is to induce hypopituitarism. Pituitary ablation has been known to affect the diabetic state since the experiment of Houssay and Biasotti³ in 1930, and attempts at arresting retinopathy through the production of hypopituitarism were initiated in the early 1950's. There is a unanimity among investigators utilizing pituitary abla-

tion that there is a definite effect on certain aspects of diabetic retinopathy,⁴ regardless of the specific techniques used. These "angiopathic" components, composed of microaneurysms, intraretinal hemorrhages, venous changes, neovascularization, and the leakage of fluorescein are said to respond, whereas exudates do not change, and fibrous proliferation does not cease and often continues to progress. In spite of changes following pituitary ablation, there is much evidence that there is not a return of the vascular abnormalities to a complete state of normalcy,⁵ and in spite of the many hundreds of pituitary ablations which have been performed, a need for an adequately controlled series still exists.⁶ Although the mortality and morbidity of such procedures are being reduced, there are certainly many problems associated with superimposing the disease of hypopituitarism upon that of diabetes. In addition, only a relatively small fraction of the population affected with retinopathy is suitable on both ophthalmoscopic and medical grounds for pituitary ablation. These facts, along with rapid improvements in the techniques of photocoagulation therapy, have resulted in a general reduction in enthusiasm for pituitary ablation amongst ophthalmologists. At a recent symposium on the treatment of diabetic retinopathy, less than one-third of the participants stated that they ever referred patients for pituitary ablation, and those who continue to refer patients are in agreement that such cases must be carefully selected.⁷ Hopefully, the promise of photocoagulation therapy will become realized in the future, and the many questions regarding the value of pituitary ablation will become academic.

The third major approach in the treatment of diabetic retinopathy, and that which appears to be most effective, is photocoagu-

lation of the retina. The procedure has no systemic effects and is specifically used to cause local changes in the retina and its blood vessels. The underlying principles involve the therapeutic application of light to retinal tissues, the absorption of photons by pigments, and the resulting change of light energy to heat energy and the production of a burn. The two pigments of the retina which absorb most of such therapeutic light energy are hemoglobin and melanin, and the most important location of the latter is in the pigment epithelial layer, the outermost layer of the retina. These two pigments are of different colors because they absorb certain wave lengths and reflect others, and these absorptive qualities are of great importance in considering optimal sources of light energy.

To date, three main sources of light have been used in clinical photocoagulation, the Xenon photocoagulator and the Ruby and Argon lasers. The Xenon light source has been used extensively since the late 1950's, and the vast majority of treatments have been carried out using this unit. The Xenon arc emits white light which includes all wave lengths in the visible spectrum as well as ultraviolet and infrared. It has proven extremely useful in occluding blood vessels lying on the retinal surface (Figs 1a, 1b), and it has the potential to rather easily destroy areas of abnormal retinal tissue. Unfortunately, the treatment of new vessels which are not relatively close to the pigment epithelium has not been satisfactory, for heat absorption in the latter layer is primarily responsible for burns in the portion of the retina lying anterior to it. The relatively poor absorption of the white light by hemoglobin alone has resulted in disappointing results in the treatment of new vessels which lie on the white nerve head or which project into the vitreous.

Laser photocoagulation was introduced experimentally in 1961.⁸ Laser light is extremely intense, having a high photon energy density, and effective burns may be obtained in very short time intervals using small amounts of energy compared to incoherent white light sources. A second advantage of laser light is its high degree of collimation. This lack of deviation of the beam makes it possible to deliver effective

Since his graduation in 1966 from Johns Hopkins University School of Medicine, C. P. Wilkinson, MD, has been certified by the American Board of Ophthalmology. In addition to his private practice in Oklahoma City, Doctor Wilkinson is Assistant Clinical Professor of Ophthalmology at the University of Oklahoma College of Medicine. He is a member of the Society of Heed Fellows.

burns over areas less than 30 microns in diameter, much smaller than the minimum coagulation area produced by the Xenon arc system. A third advantage is the monochromaticity of the laser beam. This results in an absence of chromatic aberration and permits an even smaller impact area on the retina. Since specific wave lengths are more efficiently absorbed by specific pigments, laser therapy has always offered the theoretical advantage of wave length selection based on the absorptive qualities of the tissue to be treated. The Ruby laser was the first to become commercially available. Although it possesses the ability to destroy retinal tissue, it has been a relatively disappointing tool in the treatment of diabetic retinopathy, primarily because only approximately five percent of the energy of the red beam is absorbed by vascular lesions.⁹ In addition, only relatively small amounts of energy can be delivered with available units. The newest laser in clinical use is the Argon unit which has been available for less than two years. This laser emits wave lengths in the blue-green spectrum which are relatively highly absorbed by hemoglobin. Such high energy absorption is often sufficient to produce a coagulum in the vessel itself and result in occlusion; thus vessels which do not lie near the pigment epithelium can frequently be effectively occluded. The lasers can deliver high energies over a wide range of spot sizes using a large number of different exposure times.

Photocoagulation in diabetic retinopathy has been applied using two distinct rationales. The most common method has been to directly treat abnormal retinal lesions in an effort to simply destroy them. In such cases light energy is converted to heat energy which in turn produces a coagulum and occlusion of the vascular lesions. For optimal results fluorescein angiograms are obtained. These aid in the localization of the specific vessels which feed the neovascular tufts and in the detection of sites of intraretinal leakage which are responsible for retinal edema. A second rationale in the treatment of retinopathy is to randomly destroy significant amounts of peripheral retina, as much as 30%, to simulate a widespread chorioretin-

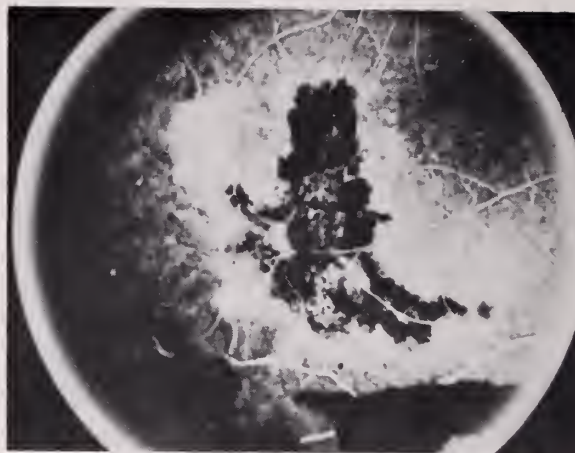


Fig. 1a Fluorescein angiogram demonstrating leakage of dye from an area of flat neovascularization which lies to the left of a previous photocoagulation scar. Dark blood lies on the retina inferiorly.

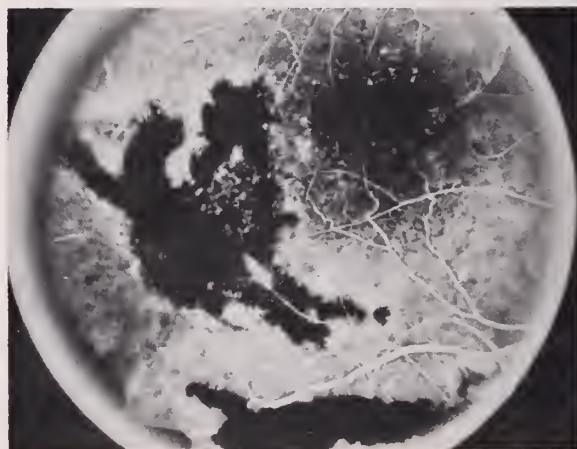


Fig. 1b The same eye following a second photocoagulation procedure. The leaking neovascular tuft has been obliterated.

itis and hopefully induce a stage of involution such as one occasionally sees in the variety of conditions mentioned earlier in which ocular disease appears to prevent the development of neovascularization. Any of the three delivery units mentioned above may be utilized for this type of treatment. This is typically carried out in the mid periphery for 360 degrees with or without treatment of specific vascular lesions.

Photocoagulation is a relatively new procedure, and final statistical proof of its efficacy in the treatment of diabetic retinopathy is unavailable at the present time.⁶ The assessment of any form of therapy in this condition is quite difficult due to the lack of predictability of the natural course of the disease, and the analytical problem is com-



Fig. 2a Fluorescein angiogram demonstrating profound leakage from a neovascular tuft arising from the nerve head. (This photograph was taken five seconds after Fig. 2b in part I of this paper)

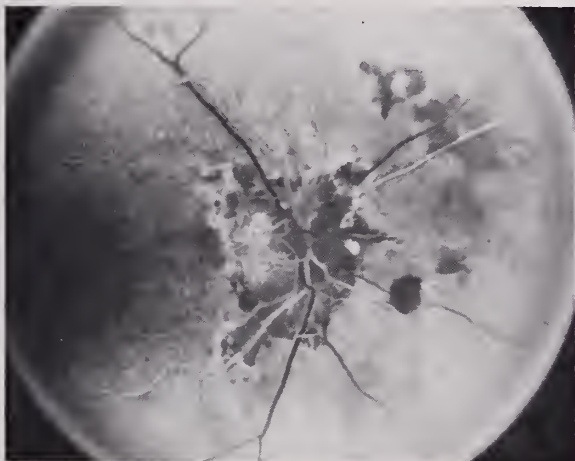


Fig. 2b The same eye following Argon laser photocoagulation. Most of the new vessels have been obliterated. This photograph was taken slightly earlier in the venous phase than Fig. 2a.

pounded by the multitude of possible variations in the numerous features of the disease. Current investigations to assess the specific value of photocoagulation are now underway. Such studies are utilizing rigid photographically documented classifications of retinopathy, and one eye of a given patient with symmetrical disease is being treated, while the second eye serves as a control. Previously published studies have not utilized suitable control eyes over a sufficient length of time, although the vast majority have indicated that photocoagulation has a beneficial effect in many forms of diabetic

retinopathy.¹⁰

Virtually all ophthalmologists interested in this subject feel that photocoagulation is the best tool currently available in the treatment of diabetic retinopathy. It offers the advantage of attacking the lesions in the eye, thereby avoiding systemic complications. Treatment sessions are rather brief and usually do not require hospitalization. The mortality rate is essentially zero, and there is little morbidity associated with the procedure. Photocoagulation with the Xenon and Argon units can eliminate most areas of flat neovascularization (Figs 1a, 1b), and the use of the Argon laser is resulting in an increased percentage of success in the obliteration of new vessel tufts in the vitreous and on the optic nerve head (Figs 2a, 2b). The treatment of leaking intraretinal capillaries has led to diminished macular edema and increased vision in many cases (Figs 3a, 3b). In addition, there is increased evidence that the destruction of significant amounts of peripheral retina can in some cases reduce the progression and severity of retinopathy and occasionally induce a "remission" of the process.⁷

There are complications with all types of photocoagulation, and many eyes have been harmed by this method of treatment. The major complications are hemorrhages and an increase in fibrous tissue contraction, resulting in retinal detachment, distortion of the macula, and a tendency for fibrovascular stalks to grow further into the vitreous cavity. Hopefully, an improved selection of treatable cases and advances in the techniques of treatment will result in a diminished frequency of these problems. Perhaps the greatest limitation of photocoagulation therapy is the fact that it does not alter the systemic disease. Thus in spite of apparently successful treatment, new neovascular tufts and recurrent macular edema are often observed with the passage of time, and further therapy must be invoked.

Photocoagulation of proliferative retinopathy is more effective and less hazardous if applied to new vessels early in the course of the disease and prior to the development of significant associated connective tissue, for once the latter is present in abundance, the application of light energy frequently results in complications mentioned above. Similar-

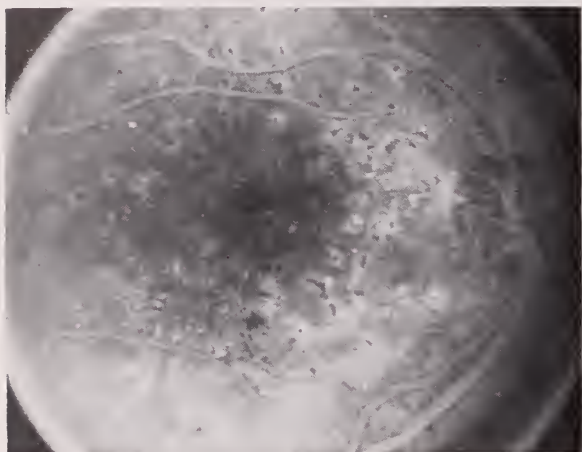


Fig. 3a Fluorescein angiogram of moderate background retinopathy as seen in Fig. 1b of part I.

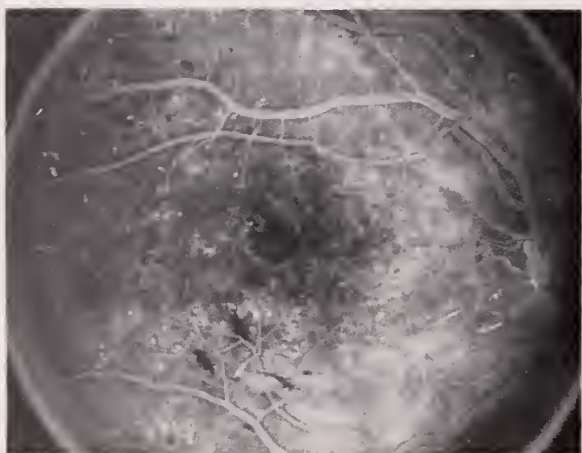


Fig. 3b The same eye following photocoagulation. Fewer microaneurysms are evident and there is less leakage of dye at an identical time following the injection of the dye. The small round white areas with dark centers represent laser scars, and not true leakage.

ly, in cases with background retinopathy and significant macular edema, the response to photocoagulation appears to be better in patients with a relatively recent visual loss than in those with a longstanding visual deficit.¹² To achieve the benefits of treating retinopathy relatively early in the disease process, soon after stages severe enough to warrant photocoagulation have been reached, the fundi of diabetic patients must be observed quite regularly. Such follow-up examinations, which should include fundus photo-

graphs whenever possible, will also hopefully distinguish those patients who appear to be in a definite stage of progression from those with a more dormant form of disease. In addition, increased data on the natural course of diabetic retinopathy in general will be obtained.

Improved monitoring of diabetic retinopathy requires cooperation between the physicians caring for diabetics and the ophthalmologists. Periodic dilated fundus examinations should be performed routinely by the former group, and the discovery of signs of diabetic retinopathy should result in a referral for a more detailed ophthalmic examination as well as follow-up studies. In such a way, more patients with significant retinopathy will be seen prior to the onset of visual symptoms, and an increased percentage of patients with severe fundus changes will reach the ophthalmologist in a treatable stage. The outcome will hopefully be a significant reduction in the incidence of blindness in the diabetic population. □

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Today's Youth and Public Policies for Health

BEN H. NICHOLSON MEMORIAL LECTURE

ROBERT A. ALDRICH, MD

Today's youth are different in certain qualitative and quantitative ways and this is reflected in their views on personal and public health.

Harris D. Riley, Jr., MD:* Let me welcome you to the first BEN H. NICHOLSON MEMORIAL LECTURE. As you know, this was established in memory of Dr. Ben Nicholson who died in September, 1968 and it is made possible by contributions from his former patients and their families and many friends and colleagues. I bring regrets to you from Dr. James L. Dennis, Vice President for Medical Affairs. He was a close friend of Dr. Nicholson and of our speaker today, but, unfortunately, had a long-standing commitment to be away.

Since this is the first Nicholson Lecture and since we are honoring such a unique

The first Ben H. Nicholson Memorial Lecture in memory of Ben H. Nicholson, MD, a former editor of The Journal of The Oklahoma State Medical Association; Clinical Professor of Pediatrics, Children's Memorial Hospital, University of Oklahoma Health Sciences Center; and Chief, Section on Pediatrics, Oklahoma City Clinic, was given on May 8, 1969 by Robert A. Aldrich, MD, Professor of Pediatrics and Head of the Division of Human Ecology, University of Washington School of Medicine in Seattle at the University of Oklahoma Health Sciences Center.

*Professor of Pediatrics, Pediatrician-in-Chief, Children's Memorial Hospital, University of Oklahoma Health Services Center.

person, I would like to take just a few moments to make some comments about Dr. Nicholson who is depicted in Figure 1. Many in this audience had the privilege of knowing him or being associated with him. Dr. Nicholson was born in 1904, the son of John and Helen Nicholson. His mother had hoped to be here today, but due to a recent eye operation, was unable to be present. Dr. Nicholson attended Webb School and was graduated from Vanderbilt University where he also received his internship and residency training in pediatrics. He joined the staff of the Oklahoma City Clinic in 1931 and in the same year was appointed to the faculty of the University of Oklahoma School of Medicine and to the staff of the Children's Memorial Hospital. He was always vitally interested in the Medical Center and its activities and for many years served as Clinical Professor of Pediatrics. As a matter of fact, a day or so before his death, he conducted a student clinic at Children's Hospital. It is perhaps traditional in talking about a deceased physician who had held a faculty appointment that he was "interested in the Medical Center and its program." Few really appreciate the depth of Dr. Nicholson's interest, the extent of his participation and the amount of time he devoted to programs of the Medical Center, especially those at the Children's Hospital, particularly for a person who was involved in a busy private practice. Table 1 depicts a report on activi-

ties of part-time faculty members in the Department of Pediatrics which I ran across in the departmental files. This was compiled by the department head in 1957. Dr. Nicholson was a faculty member since 1931. He served as attending physician in the outpatient clinic in Children's Hospital from 10:30 a.m. to 2:00 p.m. daily for 16 years or so, probably the busiest hours in the private practice of a physician. He also served as attending physician at the Children's Hospital making ward rounds five times weekly, four months out of every year, and directed the weekly Rheumatic Fever Clinic at the Children's Hospital, both for a period of years. He had continued an active teaching schedule with the students until his death. This time was served without pay, as a volunteer faculty member. I think it is a rather remarkable demonstration of loyalty to an institution.

There are many other things that could be said about Dr. Nicholson. The high regard in which he was held by this institution is evidenced by the fact that he was appointed Chairman of the Curriculum Committee, one of the most important committees of the School of Medicine, a member of the committee to select the Vice President and Dean, and many others. His contributions to improvement of child health in this region were enormous and it is impossible to list all of them at this time. He was a well known medical writer and was author of

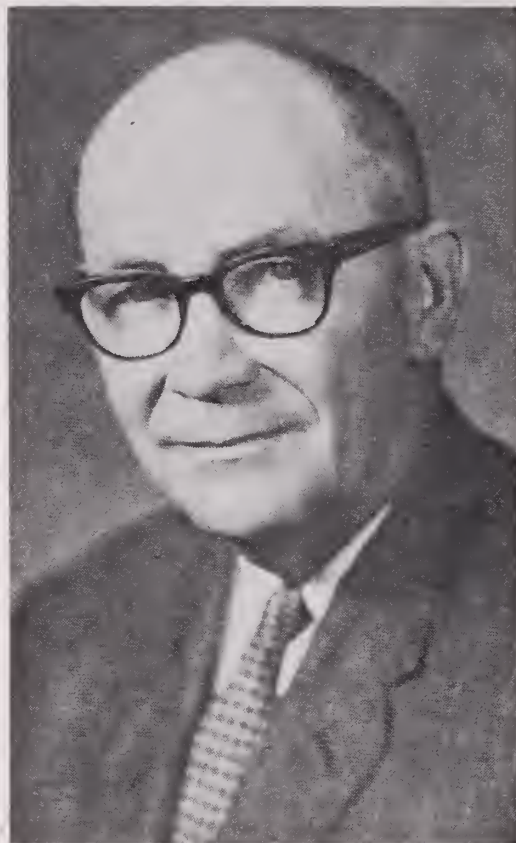


Figure 1. Ben H. Nicholson, MD

more than ninety personal publications in the medical literature. He served as Editor-in-Chief for the *Journal of the Oklahoma State Medical Association* and in 1961 *The Journal* was judged the best state journal in the nation. He once quoted to me his philosophy of a pediatrician, which briefly stated was: "Every child has a certain potential, physical, intellectual and emotional, and it is up to the pediatrician to see that nothing over which he has control or responsibility interferes with that child reaching his potential." I think I could sum up Dr. Nicholson's many fine characteristics by saying that he was not only dedicated to these principles but went the extra length to which many are unable to go. To you, Mrs. Nicholson, and other members of the family, it is our genuine privilege to honor Dr. Ben Nicholson by the presentation of the first Nicholson Memorial Lecture.

Our speaker today had the opportunity to meet and know Dr. Nicholson for at least a few years. Because of their common interest in young people, it is entirely appropriate for Dr. Robert Aldrich to give the

TABLE 1. Activities of Ben H. Nicholson, MD in the Department of Pediatrics and the Children's Memorial Hospital. See text.

NICHOLSON, B. H.

CHILDREN'S HOSPITAL ACTIVITIES:

FACULTY MEMBER, DEPARTMENT OF PEDIATRICS, UNIVERSITY OF OKLAHOMA SCHOOL OF MEDICINE SINCE 1931

ATTENDING PHYSICIAN, PEDIATRIC OUTPATIENT CLINIC, CHILDREN'S HOSPITAL, 10:30 A.M. - 2:00 P.M., DAILY, 1931-1947

ATTENDING ON INPATIENT SERVICE, CHILDREN'S HOSPITAL, 5 TIMES WEEKLY, 4 MONTHS EACH YEAR, 1934-1957

DIRECTOR, RHEUMATIC FEVER CLINIC, CHILDREN'S HOSPITAL, 2 HOURS WEEKLY, 1934-1957

WEEKLY INSTRUCTION, THIRD AND FOURTH YEAR STUDENTS ON CLERKSHIPS, 1934 TO PRESENT

first lecture. It is a real pleasure to have him with us. As was Dr. Nicholson, he is a very close and true friend. Dr. Aldrich is the son of Dr. and Mrs. C. Anderson Aldrich. His father, Dr. Andy Aldrich, is well-known to all pediatricians as the former head of the Section on Pediatrics at the Mayo Clinic and the author of several classic books in pediatrics and child development. Dr. Robert Aldrich was graduated from Northwestern Medical School in 1944. He was trained in pediatrics at the University of Minnesota. Following this and following his military duty he joined the Mayo Clinic. After a period at the University of Oregon, Dr. Aldrich was appointed Professor and Head of the Department of Pediatrics at the University of Washington in 1956. In 1963, Dr. Aldrich was named the first director of the National Institute of Child Health and Human Development. In 1965 he returned to the University of Washington as Professor of Pediatrics and Head of the Division of Human Ecology. The societies to which Dr. Aldrich belongs and the honors he has received are too numerous to list. Among the most important honors which have been accorded him are the Mead Johnson Award for research in pediatrics given by the American Academy of Pediatrics and the Special Citation of the U. S. Department of Health, Education and Welfare for his imaginative and effective leadership as Director of the National Institute of Child Health. Dr. Aldrich is one of the few persons outside of U. S. Government to ever receive the latter award. At the present time, he is Chairman of the President's Committee on Mental Retardation and is also Chairman of the University Senate of the University of Washington. The topic of Dr. Aldrich's presentation today is "Today's Youth and Public Policies for Health."

Robert A. Aldrich, MD: Thank you, Dr. Riley, very much for your introductory remarks. I was especially pleased to hear your comments about Dr. Nicholson. My most sustained contact with him took place after one of the meetings of the Oklahoma Medical Association here and we had an opportunity to spend most of the evening talking about what lies ahead in the future. It was

this interest in what's out there in front that I have always remembered about him. Therefore, I chose the title for my remarks today in this vein because I think that Dr. Nicholson was a man of great vision and also had the vigor to carry it through. This is a rare combination indeed. So, Mrs. Nicholson and family, I am greatly honored to have the opportunity to make some remarks in his memorial.

The title "Today's Youth and Public Policies for Health" is quite a mouthful but what I would like to lead you through is a discussion of the current situation in the United States of the health of children and youth against a backdrop of the forces that are bringing about change in this country. And then, if I may, try to focus very sharply on what I call the contemporary campus generation and interpret, if I may, what I think they are saying and what I think is rather unique about the present generation. I have quite a little to say about this. My credentials, other than being a good Christian, a father and a pediatrician, have been enhanced this year as the Chairman of the Faculty Senate at the University of Washington, and I have been more than I like in the midst of a great deal of controversy between generations, between students, faculty and administration, and I have learned a great deal. I do not have many answers to the questions you may have in mind. Let me try to bring this together for you in the time that I have.

As all of you know, this time that we live in is one of terrific change. The nation's economy is changing, the social structure is changing very rapidly and we are having enormous shifts in our technical capabilities. American people are being offered the prospect of vast improvements in health care that are far beyond what would have been possible just a generation ago. The prospect can be achieved only if we as a nation, as a whole people, can respectively utilize and weld together these major forces that produce these changes. We have to look and see what these forces are. It is very easy to pick out about five of them.

The first one of these five is obvious to everyone connected with the medical center. We have made some terrific advances in medical science and fundamental research

but unfortunately it is clear that these advances in medical science have not been paralleled as rapidly by advances in ways and means to develop and support the practice of medicine. There is a lot of new information that could be of value in treating patients, but we have not designed the mechanisms of getting this deferred service delivered to patients. I think there is no question that we can provide better health care than we are giving if we work out better systems of delivering it.

The second force is the increased expectation that many Americans have that they will indeed get this medical care. We have been educating individuals about the obligation they have for their personal health and we have sold the case pretty well. The public therefore expects to profit from new drugs, new surgical procedures, the complicated new equipment we have and all aspects of new technology.

The third force is what I call a growing demand for a more efficient and growing system for delivery of medical care to individuals and their families. Already this demand is giving rise to the evolution of a variety of arrangements to bring together the complementary skills, of medical and non-medical professionals and we are beginning to see the early rudiments of a system that knits together various health facilities in each community to make quality medical care more generally available. Medical care must be made available to everyone rather than just a portion of the population. And I would like to underline this because I think it is a major change in philosophy in medical care. We have in past decades talked quite a lot about providing good care to those who desire it, but I think that this philosophy has now changed. Now we are talking about providing good or excellent medical care to all. This is a significant shift and it has gone through and been accepted, philosophically, by a large part of the population almost without any argument.

Education, the fourth force, is a powerful one, and I will just mention this because education is part of everyone's life to some extent, but it is interesting that the high schools and the community colleges, medical centers

and nursing schools, and other educational institutions are beginning to rise to the challenge of training people technically to work in the health professions, or to work in some role supportive to the health profession. They are also getting far more interest in teaching the future fathers and mothers about personal health and about such things as the health of their children. So the educational system is more in the action than it has been.

The fifth force that you can pick out with ease is one that I worry about. This is the conflicting voices. The chaotic noises that you hear, everyone with his own special solution to the health care problem and I think that, on one hand, this is a good thing because a lot of interest is generated this way. But, on the other hand, it does tend to confuse things pretty badly and sometimes actually impede progress. But it is a vital force because there is so much discussion. I think therefore that you can say that in the light of these forces that further progress toward improving the health of children and the health of our youth will require a great deal more organization and cooperation and at the same time some replacement of many of the traditional, professional and institutional forms for delivering health care.

I would like now to shift the philosophical themes that we are used to thinking about. This drawing up on the board simply is an equation; DNA is the genetic material in chromosomes and in this equation man is recognizable and environment is recognizable. It has been our custom in western civilization for a long, long time to think about man as being a highly adaptable creature and that you could put man into some rather disgraceful or unpleasant situations and somehow or other he will arrange to adapt to them so that we can survive. So we have

Robert A. Aldrich, MD, was graduated from the Northwestern University Medical School in 1944. Doctor Aldrich is now Professor of Pediatrics and Preventive Medicine at the University of Colorado School of Medicine. Certified by the American Board of Pediatrics, Doctor Aldrich is a member of the American Pediatric Society and the Society for Pediatric Research.

gone along all of these hundreds of years pretty much making this assumption.

I would like to suggest that the ballgame has changed in the very recent present. The evidence begins to look this way—that man is relatively less adaptable than his environment for all practical purposes. Since about 1700, man has really mastered technology and has now gotten to the point that with his technology he can change the environment to be a human life-support system for man. The need for man to adapt biologically is not nearly as great. He can use his tools to adapt the environment. I think this is a very important difference in concept than the one we traditionally use. One other point of view that I am going to state, so that some of my other remarks will hang together, is that we have unquestionable evidence now that DNA does contain the genetic code for man. Every week that goes by there is more evidence to support it and we are beginning to even know where some of this code appears. At the same time, the whole nation has become aroused at the difficulties we are having with our environment. I would like to pose a hypothesis that possibly man does contain the code for his environment, that DNA contains the code for man. It's possible that man may contain a code of environment. In other words, he may have the capability to construct environment which in turn will be a reasonable place for him. These philosophical concepts I think are important when you consider what lies ahead in the immediate future.

There is one other point that I want to make here. I said that man is becoming relatively unadaptable from a biological standpoint but he does have one very rapid way of adapting, other than using technology, and that is his ability to use his brain and to change to ethical ideas. Some of you are aware of the book by C. H. Waddington which was published about ten years ago called *THE ETHICAL ANIMAL*. Any of you that are interested in the growth and development of ethics should consult this for some very wise words. Essentially what Waddington has said is that the evolutionary changes of man today are often exemplified by his changes in ethics. Examples of this type of change are easy to observe. There could be changes in the standard of living,

a change in the characteristics of a family, changes in goals you might have as individuals—you can see it in consumer fads and many other things of this kind. And taking a page from Marshall McLuhan, I think it is fair to speculate that the forces behind the ethical evolution are primarily related to communication. So the rapid changes in communication techniques—technology, has made these forces far more persuasive and far more rapid than in prior eras. In the history of communications change by the invention of the printing press was the first real jump, but of course the printing press did not help people who couldn't read and so there were only a limited number to take advantage of it. The next big jump was the development of a general public school system and this of course has greatly improved communication.¹ So man is using his technology to moderate the changes in environment and enabling himself to change at the same time. But also our technology such as television may have some very far reaching effects on the only area in which evolution is possible, namely the evolution of ethics. Man then is not only the instrument, he is also the object for modern technology. So with rapid advancement made in these technologies the impact becomes increasingly rapid and forceful.

Now let me turn for a brief consideration of the facts of life of children and youth health in the United States today. What is the box score for health in children and youth? I think it is useful to look at some of the demographic patterns and focus upon physical and social and psychological aspects of health. It is necessary to have information about the numbers of children, how old they are, the cultural background, where they live in geographic terms and many other facts that allow informal planning to take place. One can find some trends emerging from these patterns which may hint as to what lies ahead in the future. It is also important when you are analyzing trends to remember that trends are not in themselves the future, and there are some classical mistakes in American history where trends were accepted as the future only it did not work out that way. So keep a healthy skepticism about some of my remarks on trends. Those of you who read the Children's Bu-

reau publications probably have seen their publication number 460, which gives some very good demographic data. Some of this information comes from this publication and also some of its references. The population of the U.S. is 203,312,000. It is growing younger; 50% of the population is now under 28.3 years of age. The median age for whites and others has moved since 1960 from 30 years of age to 29.1 years. For Negroes it has moved from 23.5 years to 22.8 years so the age median is definitely dropping for white and non-white. There are 17,167,000 children under the age of five years. This trend of falling median age is expected to continue. The age group in between, who are normally the resource for support of others, are relatively fewer. That is really the adult age range and it is this section of society which is feeling the pressures of the cost of meeting health needs of the elderly and the young. The number of people over 65 is about 20,050,000; the number of children under five approximately the same figure; the adult population under 65 and above 25 are really sharing the load. Children and youth are of course very much like their parents in several respects. One of them is that they are like city dwellers; 58.2% of young people under 30 live in or near a metropolitan area. Metropolitan areas cover only one percent of the land in the United States but they do contain 68.6% of the total population. Almost 90% of our land is still classified as rural. In 1920 the U.S. population was evenly distributed between the urban and rural areas, but it is estimated that by the turn of this century, 90% will live in the urban centers. Fifty-five percent of white children in urbanized areas live in the urban fringe. Of the non-white children under 20 living in metropolitan communities, about 80% live in the central city. So there is some very sharp focusing of where people live. Nevertheless in absolute numbers, there are more whites than non-whites living in central cities. This is because the proportion of white population to non-white population is so high. Outside the metropolitan areas, the percentages of whites and non-whites are about the same. It is particularly important to note that the increase

of Negro total population since 1950 has been nearly all in central cities; 6.5 million of a total increase of 7.7 million. On the other hand, the white population growth has been in the suburbs; 33.3 million of 42.5 million.

What about children that have to be institutionalized for some reason? In 1960 there were 300,000 children under 21 in institutions. Half were in welfare or correctional institutions and the remainder in institutions because of mental or physical disabilities. There were twice as many boys as girls in these institutions. Boys made up 55% of the population of the institutions for welfare and physical disabilities, 60% for mental disabilities and 83% of the population of correctional institutions.

Family size is diminishing. Of the 28,665,000 families with children under age 18, less than four out of five have no more than three and the majority only one or two. I was astonished that there are 22,572,000 families with no children. During the immediate post World War II period (1957), the average completed family size was 3.7 members but this had fallen by the mid-1960's to slightly more than three children. There is some evidence that this trend continues. This is a striking fall and I have been told by some very good demographers that one of the sharpest drops in expectations of number of children in the family has been among non-white women in the child-bearing years. Their expectations of family size through their childbearing years have been very sharply reduced and are now somewhere around 2.9 or three.

In 1969 there were 9,821,000 children under 18 years of age living in families with incomes below the poverty level. There are another 54,510,676 in families with an income over \$6,000. There are 33,846,210 children in families with an income of \$10,000 or more. The nine million youngsters living in the lower income range are by no means all the children that live in poverty. Three thousand dollars annual income is defined by some government agency as the poverty level for a family of four, but if you take into consideration the number of children in the families with incomes below 25% of the poverty level you come up with 14,325,000 children living in very severe economic need.

Of the children living in poverty the majority are white. However, among the non-white children, some 30-40 percent are living in poverty and this again is because of the much greater total number of whites than non-whites. About 40% of the non-white children under 18 years of age are poor, as compared to only 10% of the white children. The proportion of non-white children who are poor is three times that of the white. The white population is so much larger than the non-white, seven times larger, that the number of white children listed as poor is larger than the number of poor non-whites. So it is very important to keep ratios and numbers in mind when considering how to bring health care within the reach of everyone. Poverty seems to select large families; 1,135,000 of the families with six or more children have an income of less than \$3,000. Only 5.8% of families with less than three children were in this economic group. So it appears that families that are both large and non-white run a double risk of poverty.

A couple of other points that are interesting:

There is a very good analysis in Children's Bureau's documents of families headed by a female. In general, they have an income much less than the family headed by a male. In actual figures, the family with a female head has an income under \$3,000 about ten times as frequently as families with male heads other than husband-wife headed families. This is even more a discrepancy when one looks at non-white families. Nearly 43.3% of Negro families headed by a woman have under \$3,000 income and 80% of the Negro families headed by a woman have incomes under \$6,000 a year. So it is quite evident from the above consideration that poverty is more prevalent among families headed by a woman. It is also more prevalent among farm families, non-white families.

A comment or two about the health of children born to teenagers and unmarried mothers. Teenage marriages are increasing. This probably reflects the very large number of teenagers because there is such a big increase in the population in this age group. In 1965 there were a little over one million mothers under 20 years of age who were married. This is a slight increase from

950,000 in 1960. There were 600,000 births of babies among teenage mothers in 1968. There were about 450,000 in 1950. An interesting fact is that the rate of illegitimacy has changed very little among teenagers. The incidence is just about the same as it has been for quite a few years, about 50% more in 1967 than in 1970 but it has risen significantly, and very significantly among those 25 years of age or older, about 100%. The illegitimacy rate is higher among the poor and among the non-whites. Every pediatrician knows that there is something about being born out of wedlock that gives the baby less than an advantageous start both from social and cultural standpoints and also from a purely physical biological standpoint. However, the number of illegitimate births to teenagers has risen very greatly in a single decade and that is because there are so many teenagers. In the age group 15 to 19, the number of illegitimate births rose from 68,900 in 1955 to 123,100 in 1965 and 158,000 in 1968. This is of course because of the large number of women in this age group. Over half of the births out of wedlock in 1968 were non-whites as compared to a much lower figure earlier.

I will just mention briefly that infant mortality, which is discussed in these kinds of circles frequently, has been dropping slowly. There is a wide variation in infant mortality depending on the part of the country you live in or the county you live in. Between states, infant mortality ranges from approximately 17 to 35. This is mortality per 1,000 live births. But the non-white infant mortality rate is much higher than for whites—roughly 35 to 19. There are a lot of factors affecting this: poor nutrition, prematurity, unavailable health care and medical services and just generally poor living conditions or situations.

Some estimates are also available on the numbers of children with handicapping conditions. Educators in the public school system usually figure that about 12 to 15% of school children have some kind of handicap requiring special education. We really don't have the actual breakdown on this subject so I will have to use estimates. There are about 2.7% of children under age 17 with activity limitations due to chronic conditions.

This does not include children in institutions. This points up one major conclusion, at least, that I would draw. Health care planners in the United States had better begin to get an accurate analysis of handicapping conditions in children and youth if we are going to do anything sensible with our resources for both prevention and care of the specific handicap.

Just a word about accidents. I was standing in downtown Seattle a few weeks ago talking to a friend of mine who is in the field of nutrition and I had said that I was surprised to see the CBS documentary showing such severe malnutrition in some rural parts of the South. I said I had also seen quite a bit in the Northwest up in the river valleys very much like West Virginia. "Yes, but," he said, "they are not dying in the streets"; and I said, "Well, we happen to be standing under the freeway so let's talk about that." The fact is that in 1968 there were 54,862 deaths from motor vehicle accidents and the ratio of clinically significant injuries to deaths ranged all the way from 35:1 to 100:1 depending on who you read. If you pick a figure of 50, this gives you 2.7 million clinically significant injuries and if only one-fifth of those were children and youth, you have 540,000 clinically significant injuries in one year and that is not counting the deaths from motor vehicle accidents. So I suspect that if this epidemic produced hives and a high fever we would have done more about it than we have.

There is another area of child health that we need to look at. Some of the demographic data can be greatly enlarged and greatly refined, and I won't take any more of your time to go over this, but there is an enormous stack of information which leads me to draw rather unpleasant conclusions about our public policies with regard to the health of children and youth. I think that it is perfectly clear that children and youth born into different social or cultural or economic circumstances in the United States do not receive uniform attention to their medical and dental health. Those at the greatest risk with the greatest need and the least health services are the non-white, the poor, the central city or rural dweller, the product

of a one-parent home and those living in families headed by a parent of low educational achievement. Our present society has not figured out how to provide all children and youth even a mediocre level of medical and dental care. The primary forces which seem to exert major influences include maldistribution of income, family disruption, maldistribution of services, the urban migration—the migration from the rural areas to the urban area, and the lack of a preventive approach to health, especially for the very young child. So I have concluded and have been saying very recently that I think our public policies for the health of children and youth is this: In the United States children are to some extent expendable. I know these are hard words but I think it is necessary to look at the data and really be honest with ourselves about what has happened.

Now let me turn to perhaps a brighter thought of what I think is a rather gloomy record. What are some of the things that can be done and who are the people who might very well be doing them? I think when the history of this century is written that the number one phenomenon that every one will pretty well agree on is the phenomenon of urbanization. Urbanization needs much more than the growth of large metropolitan areas. A metropolitan area has sort of a field of force like a magnet that reaches out 90 to 100 miles in radius and, of course, affects rural areas as well as the metropolitan complex. It affects all of the people who live in these communities. It is almost impossible to consider any single aspect of the urban phenomenon all by itself. The whole complicated organism of a metropolitan community has to be looked at at one time. Two questions emerge which are worth considering.

First question is this: Does the physical environment of a metropolitan community affect the health of children and youth adversely? The second question: Is a health networks part of the system of urban network provided by urban planners and designers? This first question can be answered affirmatively. The physical environment certainly does affect both the health and development of children and youth and sometimes in an adverse fashion. There are many illustrations of this: the cheap lead-base

paint used in slum housing that small children eat and get lead poisoning; the pervasive use of the television set as baby sitter (there are several books on this); the school age child who will cross high speed streets with unsupervised crosswalks; the teenager in suburbia with no place to go for social activities because of obsolete zoning restrictions or blue laws and is forced to go downtown for his kicks; and the physically handicapped child trying to get about in buildings, streets and vehicles apparently designed by and for young athletes. It is not even necessary to mention slum sanitation, crowding, isolation from transportation to and from medical and dental services and facilities. The design and function of the city is an integral part of the daily life of every city dweller. But for the child it is a part of his growth and development with all that this implies.

Children who are well can be made ill by the city environment, and children who are sick, malformed or disabled may be slow to recover for the same reason. We are ignorant about the role that physical environment plays in mental development or perception. What are the state's needs at different ages of childhood? What room dimensions are optimal for an infant? What is the qualitative and quantitative character of an urban neighborhood essential for the school age child? What should there be in a city for teenagers? All of these questions and a lot more need answers based upon serious scientific research.

In the second question, what can we do to include health services for children and youth in urban planning and design: Recently there has been a confrontation between those who plan, build and design cities and those who are primarily concerned with the nature of man. From this there emerged a new effort aimed at improving the quality of life among those who inhabit our cities. There are some universities already entering into this confrontation very actively and the results of these efforts are still to be made visible. Particularly lacking in this confrontation is concern for the role of children in the cities. In terms of public policy for our cities, the principles of growth and development, physical growth and development, and behavioral growth and develop-

ment simply don't get introduced at all. They are absent from our public policies and they should not be any longer. We have health networks in our mind but if you look at the design of an urban community you will find networks for almost everything but health. You see a network drawn out in multicolored diagrams for highways, for water, for gas, for electric lines, television, telephone, fire stations, police stations, parks, museums, railroads, schools, supermarkets, bus lines, etc., but no health networks. We set up our elementary schools, as educational networks, where the children are placed where that age group lives, but for health care for the same age group we have a separate arrangement which may have very different placement, using different land acquisition, different buildings and different staff. So we have not made use of an existing network or collection point for people of this age.

I am simply trying to point out that several aspects of the health of children and youth should be built into the design and function of our cities. So I think that it is fair to say that health networks are an essential part of an urban community and ought to be created along side the other networks that exist in the city. We are not going to see the proper allocation of our state or federal resources going into health unless it can be measured against the other major networks. Should monies for housing, hospitals, clinics, doctor's offices, health departments, etc., come out of the housing budget for the nation or should this come out of the health budget? I think it is fair to say that a big slice ought to come out of the housing budget.

Let me turn to the happiest note of a difficult essay for me, because some of it was quite shocking. I would like to talk a little bit about what I call the contemporary campus generation and how they see major problems of this kind; in this instance, public policy toward health. In a nutshell, I think that the medical profession is going to change very rapidly in the next decade and it, along side a number of other professions such as law, and probably dentistry, is entirely unaware of how rapid this change is likely to be or just how it is going to come upon us. I think it is also fair to say that

a large segment of the public does not know what is really happening in education, particularly higher education, and in turn, how this is affecting society. I think the reason this is going on is because our children are different from us, certainly from my generation, in some very basic ways.

I would like to share with you some observations about the difference between this generation and, say, my own generation who are the middle-aged group mostly in the power structure of the U.S. I think we are living right on the edge of probably the greatest historical era in the recorded history of man, roughly 5,000 years. And I do not think things have ever changed as rapidly as they are changing now. We are going to see things happen that make the Renaissance look very, very simple. I do not think they will take 400 years, for example. I think you will see them happen in one generation, the present generation that is growing up. In a very real sense, it seems to me that we are the last generation of a way of life which has been the same in very fundamental respects for thousands of years. We are the last generation of a way of life which will be gone before we are gone. Our children, on the other hand, are the very first generation of a whole new world which is being born right before our eyes and will be here before we are gone. I think that the present generation is different quantitatively and qualitatively and they look at major social problems in quite a different light than we do.

Let me mention a few of the quantitative differences between this generation and, let's say, my generation. It is interesting that right now, out of all the people that have lived on this planet, 25% are alive. I mentioned some of the demographic figures for the population of the U.S. We have got about 57 million youngsters in school and I mentioned that before school, under five years of age, there are almost 20 million. This is an awful lot of people that we are facing for the first time. The point is that children and youth are very numerous and if only five percent have some kind of physical or social problem there will be an awful lot of work for the health professionals to do.

Politically this youth's generation has tremendous potential. For example, between the election that we just experienced and the one that will come next, there will be 12½ million more young people who were too young to vote in the last election that will be eligible to vote in the next one. And any politician will tell you that that is one very, very large number of voters. It certainly implies that they are going to have the political strength to get their way about many things.

Not only is this generation huge in numbers but it is affluent. It is estimated that teeny-boppers alone spend 15 billion dollars a year and that they really do influence the producers and the retailers of consumer goods. I don't know how this affects some of you ladies but this is where the mini-skirts came from. Some of us who would rather have our pants not so tight so that we don't have to take our shoes off to put them on are being influenced by the teenyboppers generation and their buying power. Advertising executives tell me that they don't really pay much attention to products for anybody over 30 years of age. They say it just isn't worth it. The market below age 30 is so popular, I guess this explains why so many of us drive around in Mustangs with our feet stuck straight out. My point is that there are some major quantitative differences. Size and money are two of the big ones.

There also are some qualitative differences. Let me click off a few of these. I think they are awfully important. These are qualitative differences in this new generation. Number one, you can't starve to death in a civilized part of the United States today. Somebody will come and pick you up off the street and take you to a hospital and somehow or other see that you are fed, even if it is done intravenously. The motivation to work and earn money to keep from starving has vanished. I work basically around this philosophy and I think many people in the room do. Many people in this new generation do not subscribe to this type of motivation. I think for the first time in the history of man and for the largest generation of all time, we don't have to work to keep from starving to death. All of us here are probably pretty work-oriented and we

have been taught from way back that work is good and that through work man becomes worthy. Things have changed in this particular ballgame and I think that this particular generation is not work-oriented. I am not putting a bad or good value on this; I am just simply saying that they are not primarily work-oriented the way we were. Number two, another difference: I think that they are aware of the fact that they may not be able to work anymore. One executive wrote an article not long ago predicting that the 20-hour work-week is right around the corner. A presidential commission reported to President Johnson at the beginning of last year, that one of the alternatives this country can take in 20 years, an alternative to the social threat of automation, is to retire everybody at 38 years of age. Some of the politicians on both sides of the aisle in Washington, DC, are seriously considering guaranteed national minimal income for everyone, whether they work or not. They say they are doing this because economy tells us that if we would only recognize it, about 25% of our population is economically obsolete right now. They can't do anything that we can't do better with a machine and, furthermore, by current educational technology, they can't be trained to do anything that we cannot do better with a machine.

So we have two distinct labor markets developing—the highly skilled market along with a chronic, deepening labor shortage, and then an unskilled labor market where there is widespread and increasing unemployment.

The third difference, and this is a big one: you don't have to stay on earth anymore. We have always assumed that everything that happens, happens here on the planet and there was no place to go. But that isn't so anymore. We watched the Christmas orbit of the moon and we read of the very great progress that Russia has made in going toward interplanetary explorations. For very young people, preschoolers, it is a part of their consciousness that they are not earth-locked anymore. So this is a different point of view that they grow up with. I remember talking with one rather young child and I asked him if he believed in God, and he answered, "No." I

said, "What do you believe in?" and he said, "I believe in man." I said, "Do you believe in a hereafter or heaven?" and he said "No." I said, "What do you believe in?" and he said, "I believe in now." This is a change and I think it is partly derived from this feeling that you don't have to stay on the planet all of the time.

Another difference which is terribly important is that you don't have to have children anymore. In other words, you can separate out procreation of the race from the sex act itself and this is now under the control of man and woman. There is evidence already that this is having an effect on the structure of the American family and certainly this has not been lost on the children and youth that are growing up today. So here is another qualitative difference.

I think that the new generation then is growing up with some very real differences in value. In a sense they seem to me to be free, freer than we were. We conformed very precisely to the acrobatics and the dance of adjustment to the needs of society. We were experts at precision in a way, whereas they are saying that they place greater value than we did on the ability to be different so long as being different doesn't interfere with the ability of somebody else to be different. I think this is where the shifts are taking place. They don't believe in conformity because they don't see human efficiency as a goal for man.

There are some aspects of teaching in our society that I just want to comment on before drawing a few conclusions. We do quite an effective job of teaching conformity in society. Right from the time of birth we try to get the message across, and I think you will recognize many of them. We say it is better to be a teacher, doctor, lawyer, editor than it is to be a mechanic or custodian and yet everybody can't be a teacher, doctor, lawyer or editor. We have said it is better if you are a woman to be 38-24-35 than to be 33-30-40. It is better to be a blonde than a brunette. We said that if you are a man it is better to be six-feet-four than four-feet-six, and it is much better to be an athlete than a non-athlete. We said it is better to be a scholar than a non-intellectual, and we have said that it is better to be white

than to be black and we have also said it is better to be a western man than non-western. We have said many of these things, right from birth, to our children. We even said that it is better to be a man than a woman and we have made it pay off for those who could conform to these values or statements we make to our children.

I think this generation is seriously questioning our assumptions, many of them and many more than I mentioned here. I think that this accounts for the dissension on the part of really the cream of our society which is the top group of this generation which is presently on campus. I think it also accounts for the consternation, fear, anxiety and frustration of the middle aged generation who can't understand why in heaven's name this generation doesn't believe what they believe, and they have great difficulty talking back and forth. So instead of teaching for a world in which everybody has to be the same to be worthy, I think we have to teach about a world in which it is okay to be a little bit different and it is okay to be what you are because you can't really be something else anyway.

In terms of public policy for health this year, I have been fascinated with the discussions and some of the formal symposia we have had with students on our campus. The University of Washington has about 33,000-34,000 students and somewhere around 2500-3000 faculty members. It is a very large campus. I guess it is the largest campus west of the Mississippi. We have had a lot of tensions and anxieties among students and faculty but also a lot of discussion. The kinds of things that the students seemed to be deeply concerned about are some of the matters I just touched on. They are very much worried about what sort of an environment their children are going to have. One of them put it to me this way. He said, "What are the ethics of allocating major resources through bond issues to build new roads, schools, a dome stadium, various other things that our generation is going to pay for and so are our children when these are not the things we want? These are the things you want and we haven't even been consulted." This is the question he asked

me. Boy, that is a tough one to answer. How do you answer this question?

In the health area, getting away from environment for a minute, they are very much interested in the groups of people which health care does not reach. Remember I mentioned the people who live in low economic situations or in rural areas or in central city where services are not delivered as effectively as you would like them to be. They want something done about this. Many of the students who are in our freshman class in the medical school at the University of Washington, are prime social activists. I would say 35 to 40% of them are very, very much of this frame of mind and they are not the least bit interested in molecular biology. This is going to be an awful shock to our friends in research laboratories to find out that many students are not a bit interested in this as a career.

These are the kinds of changes that this generation is going to bring about because their value systems are different. I think what we are seeing happen in terms of public policy for health is a rapid change being brought about towards delivery of good services to everyone, a major shuffle in the ways services are delivered, a change in emphasis away from laboratory science in the physical sciences or the biochemical or physiological sense towards the social sciences. This very large and very potent generation with lots of political power and lots of money is moving in this direction. I don't know to what extent you are seeing this in your professional schools here at the University of Oklahoma, but if you aren't, this year or last year I expect you will very soon because this seems to be a nationwide movement.

My final point and my summary conclusion that I would like to share with you is this: I think that the time has come for all of us who are in another generation to recognize that the principles of growth and development of the continuation of generation to generation is an exceedingly important concept to introduce into all public policies and especially public policies concerning health. Rather than be frustrated and anxious about this new generation, I think this is the time to open the doors to them, to consult with them, to let them be heard before decisions are made and, because of their

number, the excellence of their education and their vigor, let them in as fast as possible because here is the manpower we have all been worrying about. Here is manpower which is numerous enough to do some of the jobs in health service and who are asking to do it and are asking to participate in the decisions of strategy and tactics. My suggestion is rather than feel worried about

them, join hands to a large degree and bring them into our confidence; learn from them as they learn from us and get on with the job of better health care, not only for children and youth but our whole society. Thank you very much. □

Statistics have been updated based on more recent sources (statistical abstract of the United States in 1971, U.S. Bureau of The Census and the National Center for Health Statistics).

EDITORIAL SERVICES AVAILABLE

A number of physicians have inquired about manuscript services. The OSMA could find only one person knowledgeable enough on medical manuscripts. Ms. Barbara G. Cox maintains an office in the University of Oklahoma Health Sciences Center to assist prospective medical authors. She is not employed by the University.

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\$3.50 per hour

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Learning Resources Center Office
University of Oklahoma Health Sciences Center
P.O. Box 26901
Oklahoma City, Okla. 73190
Telephone 405 271-4733

HUMAN RABIES—PREVENTABLE

Diagnosis . . . rabies! Prognosis . . . grave! It has been twenty years since physician, public health official, and family in Oklahoma have faced the brutal reality of this uniformly fatal viral encephalitis. Hopefully, the last case of human rabies in this state occurred twenty years ago. With today's materials and knowledge, there need not be another rabies death.

Unfortunately, all is not well. Such basic control measures as vaccination of all domestic carnivorous pets, and control of stray animals, are being neglected. This neglect, combined with a sizeable wild animal reservoir of rabies, is producing human exposure situations at an alarming rate. This problem takes on graver implications considering the frequency serious errors.

In recent weeks all of the following errors have been made by veterinary, medical, and osteopathic physicians.

1. failing to immediately start prophylaxis for bites by wild carnivores, skunks and bats;
2. failing to immediately start prophylaxis when animals under quarantine de-



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velop CNS symptomatology;

3. failing to administer rabies antiserum;

4. failing to infiltrate rabies antiserum around wound sites;

5. failing to administer a sufficient number of doses of vaccine (21 doses, plus 2 boosters, are indicated in severe exposure cases);

6. confusing antiserum with vaccine and administering only the former;

7. confusing "incubation period" with "pre-symptomatic virus excretion period";

Antirabies prophylaxis is complicated, and recommendations for use of available prophylactic materials change as new research data become available. When in doubt concerning specific exposure situations, call your State Epidemiologist at 405-427-6561. Consultation is available around the clock, seven days a week.

COMMUNICABLE DISEASES IN OKLAHOMA FOR SEPTEMBER, 1972

Disease	September 1972	September 1971	August 1972	Total to Date	
				1972	1971
Amebiasis	2	6	1	22	47
Brucellosis	—	1	1	5	4
Chickenpox	1	4	7	141	191
Encephalitis, infect.	1	5	3	11	29
Gonorrhea	833	905	994	7741	5705
Hepatitis, infect. & serum	61	89	63	584	624
Leptospirosis	—	—	—	1	1
Malaria	1	3	1	5	65
Meningococcal infections	—	—	—	6	5
Meningitis, aseptic	12	35	7	34	106
Mumps	1	1	3	151	192
Rabies in animals	10	7	20	248	251
Rheumatic fever	1	2	—	24	20
Rocky Mt. spotted fever	1	1	8	29	27
Rubella	3	1	—	37	64
Rubella, congenital syn.	—	—	—	—	—
Rubeola	—	1	1	9	791
Salmonellosis	20	17	10	108	147
Shigellosis	19	12	33	112	63
Syphilis	72	103	115	876	948
Tetanus	—	—	—	1	1
Tuberculosis, new active	20	33	33	266	258
Tularemia	1	2	—	9	16
Typhoid fever	2	—	1	4	2
Whooping cough	4	—	4	26	16

Abortion Survey Tabulation Completed

Nearly 1400 OSMA members responded to an association survey concerning their attitudes on abortions. The survey was authorized by the OSMA House of Delegates during its May meeting.

The questionnaire was sent to all members of the association and approximately 60 percent responded. The survey was analyzed by Rex Billington, PhD, a statistical expert from the O.U. Health Sciences Center.

After analyzing the survey form and the returns Doctor Billington said, "You have a clean, neat, unambiguous survey."

Since there was not a 100 percent response to the survey, it was arbitrarily decided to use a 2/3 majority as a clear majority response. In other words, unless at least 67 percent of those responding indicated a particular answer, this answer was not said to be clearly the majority opinion of Oklahoma physicians.

In his analysis Doctor Billington stated, "The questionnaire data indicated that physicians in the state of Oklahoma approve of abortions:

"—If the life of the mother would be endangered by continuation of the pregnancy (94 percent approval).

"—If the pregnancy results from rape (90 percent approval).

"—If the pregnancy results from incest (87 percent approval).

"—If there is a significant risk that the baby would be deformed (86 percent approval).

"—If the physical health of the mother would be significantly impaired by the pregnancy (89 percent approval).

"—If the mental health of the mother would be injured by the pregnancy (79 percent approval)."

The survey results did not give a clear mandate on any one course of legal action regarding abortion laws preferred by physicians. However, there does appear to be a

desire on the part of most physicians that there be some legal statement in the law books different from that which now exist.

In a check on legal preferences OSMA physicians gave the following answers:

36.8 percent preferred a repeal of all abortion laws with abortion to be decided by physician and patient alone.

23.4 percent preferred some extension of Oklahoma law to include social reasons for abortion.

14 percent preferred Oklahoma's present abortion law remain.

11.6 percent preferred abortion on request during the first 12 weeks of pregnancy.

7 percent preferred abortion on request during the first 20 weeks of pregnancy.

2.7 percent preferred no legal abortions be available.

4.5 percent said they didn't know what their preferences were.

In his analysis Billington stated, "A further question relating to abortion law asked that if the law is changed, should it provide for abortions only after consultation. . . . 55.4 percent of respondents said yes . . ."

It is also clear that a majority of physicians would require that approved abortions be performed only in hospitals accredited by the Joint Commission on Accreditation of Hospitals.

The following is a recitation of each question showing the total number of respondents and the percent of that total represented by each answer.

Do You Approve of Abortion:

1. If the life of the mother would be endangered by continuation of the pregnancy? (1350 responding): Yes - 94.1 percent; No - 4.4 percent; No opinion - .7 percent; Other - .8 percent.

2. If the pregnancy results from rape? (1305 responding): Yes - 89.5 percent; No - 7 percent; No opinion - 1.2 percent; Other - 2.3 percent.

3. If the pregnancy results from incest? (1353 responding): Yes - 86.5 percent; No - 8.9 percent; No opinion - 2.6 percent; Other - 2 percent.

4. If there is a significant risk that the baby would be deformed? (1353 responding): Yes - 86.1 percent; No - 9.6 percent; No opinion - 2.6 percent; Other - 1.7 percent.

5. If the physical health of the mother would be significantly impaired by the pregnancy? (1350 responding): Yes - 89.2 percent; No - 8.1 percent; No opinion - 1.2 percent; Other - 1.5 percent.

6. If the mental health of the mother would be injured by the pregnancy? (1353 responding): Yes - 78.9 percent; No - 14.4 percent; No opinion - 3.8 percent; Other - 2.9 percent.

7. For an unwed mother? (1331 responding): Yes - 62.2 percent; No - 28.1 percent; No opinion - 4.0 percent; Other - 5.7 percent.

8. For social reasons such as multiparity (four or more living children)? (1363 responding): Yes - 54.6 percent; No - 38.4 percent; No opinion - 3.7 percent; Other - 3.3 percent.

9. For social reasons such as pregnancy in a woman of age 35 or greater? (1358 responding): Yes - 49.6 percent; No - 42.8 percent; No opinion - 4.5 percent; Other - 3.1 percent.

10. For economic reasons such as parents cannot afford another child? (1350 responding): Yes - 53.0 percent; No - 39.7 percent; No opinion - 4.3 percent; Other - 3.0 percent.

11. For birth control failure such as woman pregnant with IUD in place? (1350 responding): Yes - 53.7 percent; No - 37.4 percent; No opinion - 6.1 percent; Other - 2.8 percent.

12. Should abortion by a competent physician be available upon her own request to any woman capable of

giving legal consent? (1348 responding): Yes - 53.6 percent; No - 34.5 percent; Unable to give unqualified yes or no answer - 11.4 percent; Other - .5 percent.

13. Should the husband's consent for an abortion be required if the husband is available? (1354 responding): Yes - 72.1 percent; No - 15.2 percent; Unable to give an unqualified yes or no answer - 12.6 percent; Other - .1 percent.

14. Should abortions be required to be performed: (1254 responding): Only in hospitals accredited by the Joint Commission on Accreditation of Hospitals - 71.1 percent; Only in hospitals licensed by the State Department of Health - 25.4 percent; in any hospital with no accreditation, licensure, or regulation requirements - 3.4 percent; other - .1 percent.

15. Which of the following would you prefer? (1319 responding): No legal abortions be available - 2.7 percent; Oklahoma's present abortion law remain - 14.0 percent; Some extension of Oklahoma's law to include social reasons for abortion - 23.4 percent; abortion on request during the first 12 weeks of pregnancy - 11.6 percent; abortion on request during the first 20 weeks of pregnancy - 7.0 percent; repeal of all abortion laws with abortion to be decided by physician and patient alone - 36.8 percent; don't know - 4.5 percent.

16. If the law is changed, should it provide for abortions only after consultation? (1315 responding): No - 35.7 percent; No opinion - 7.1 percent; If "yes" I recommend concurrence of at least _____ additional physicians - 39.0 percent; If "yes" I recommend that an abortion must be approved by a committee of Hospital Medical Staff - 16.3 percent; Other - 1.8 percent.

17. Findings of this survey are for informational purposes. The results will be released to the OSMA membership, legislature, press and the OSMA Board of Trustees. Should the OSMA Board of Trustees develop a

formal position on the question of abortion for presentation to the legislature based on the findings of this survey? (1341 responding): Yes - 77.6 percent; No - 12.7 percent; No opinion - 6.0 percent; Other - 3.7 percent.

Contraceptive Information and Methods

18. Should *contraceptive information* be given to sexually active minors when requested *without* parental consent? (1407 responding): Yes - 78.5 percent; No - 18.2 percent; No opinion - 2.0 percent; Other - 1.3 percent.

19. Should *contraceptives* be given to sexually active minors when requested *without* parental consent? (1355 responding): Yes - 59.4 percent; No - 34.0 percent; No opinion - 3.9 percent; Other - 2.7 percent.

20. Should the OSMA, based on this survey, take a stand on providing *contraceptive information* to sexually active minors when requested *without* parental consent? (1355 responding): Yes - 68.8 percent; No - 23.3 percent; No opinion - 6.1 percent; Other - 1.8 percent.

21. Should the OSMA, based on this survey, take a stand on providing *contraceptives* to sexually active minors when requested *without* parental consent? (1335 responding): Yes - 58.4 percent; No - 31.5 percent; No opinion - 6.8 percent; Other - 3.3 percent. ☐

OSMA Journal Listed in Hospital Literature Index

OSMA Journal Editor Mark R. Johnson, MD, has been notified by the American Hospital Association that the OSMA Journal is Regularly indexed in the Hospital Literature Index.

The indexing notice came from the AHA's Director of Library Services, Helen Yast.

Hospital Literature Index is described as the "most complete reference guide to health care administration material published each year." It uses an author-subject index covering approximately 500 journals. ☐

Proposed Malpractice Reinsurance Legislation Introduced

Professional liability insurance carriers would be allowed to reinsure their coverage with the federal government under a bill introduced by Senator Gaylord Nelson, Wisconsin Democrat.

A federal medical malpractice reinsurance board would be created to make reinsurance available to cover liabilities incurred by insurance companies for amounts over \$25,000, but not exceeding \$1 million. The bill also calls for studies to be conducted to extend these limits both upwards and downwards.

The board would arrange appropriate financial participation and risk sharing in the reinsurance program by insurance companies or other insurers. Any loss over the \$25,000 level would be submitted to the board by the insurance company for review and possible reimbursement.

Nelson is a member of the Senate's Labor and Public Welfare Committee and the Subcommittee on Health. His bill, introduced September 20, was apparently in response to a recent Senate investigation that revealed that physicians in a number of states were having difficulty purchasing professional liability insurance.

Nineteen members appointed by the President by and with the advice and consent of the Senate would make up the board itself. The members would be selected from representatives of the general public, the insurance industry, state and local governments including state insurance authorities, and the federal government. Of these not more than six would be regular full-time employees of the federal government, and not less than four would be representatives of the private insurance industry and not less than four would be representatives of state insurance authorities. ☐

Drug Price Listing By Generic Name Opposed

Indications that the Food and Drug Administration was considering a plan to advise physicians on the relative prices of drugs in the same generic or therapeutic categories prompted immediate opposition from the Pharmaceutical Manufacturers Association.

PMA President C. Joseph Stetler, formerly legal counsel for the AMA, warned that physicians could infer from the listing that the FDA had found these products to be therapeutically equivalent. He went on to state: "The danger of such an inference is obvious, when one remembers that virtually all of the studies that have investigated the subject of equivalence have, in fact, demonstrated the inequivalence of the drug products tested. Thus, any such listing by the FDA will necessarily result in assumptions by prescribers which are in direct conflict with all of the available evidence collected to date."

Attorney Stetler went on to point out that although the FDA might not be legally responsible if physicians relied on the drug list "to the detriment of their patients" it would seem that the FDA did have a moral responsibility for suggesting equivalence which was unsupported by factual data.

In the closing portion of his letter Stetler pointed out that the area of drug economics is not the legal domain of the FDA. The law does not authorize the agency's involvement in the subject "nor does it contemplate that FDA would attempt to influence drug prescribing based upon cost factors," he said.

In discussing the major problem with a drug price listing the PMA President pointed out that the information could be misleading to the physician and the patient. Because of price differences resulting from quantity purchases or variations among different types of purchasers, no accurate generalization could be made on what the dispenser actually pays for the drug product. He went

on to state that any indicator of the manufacturer's price "bears no necessary relationship to the cost actually born by the customer." □

Medicare Hospital Deductible Increased

Under a ruling from the Price Commission, a required increase in the Medicare hospital deductible was cut in half from \$8 to \$4 according to HEW Secretary Richardson. Beginning January 1, 1973, a Medicare beneficiary will be responsible for the first \$72 of his hospital bill.

The present Medicare deductible rate is \$68. Based on a mathematical formula in the Medicare law deductibles should have gone up to \$76. However, intervention by the Price Commission reduced the possible increase.

The Medicare law requires that the Secretary of Health Education and Welfare announce an increase in the deductible amount for each calendar year based on the most recent level of Medicare hospital costs for which annual data is available. Presently annual data is available for the year 1971. The current increase, therefore, reflects in part costs incurred prior to the Economic Stabilization Program.

Prior to the formal announcement of the 1973 rate, Secretary Richardson had asked the Cost of Living Council to determine if the hospital deductible was subject to the provisions of the Economic Stabilization Program. Reasoning that the deductible represents a price paid by Medicare recipients for hospital services, the council ruled that it is governed by Price Commission regulations limiting the increase in prices which can be charged by institutional providers of health services.

Medicare law also requires that whenever the hospital deductible amount changes comparable changes must be made in the dollar amounts a Medicare beneficiary pays toward a hospital stay of more than 60 days, or a post hospital extended care stay of more than 20 days. Presently the beneficiary is paying \$17 per day for the 61st through 90th day. Under the

new change he will pay \$18. If he has a post hospital stay of over 20 days in an extended care facility, he will pay \$9 per day toward the cost of the 21st through 100th day, up from the present \$8.50 per day.

If he needs to draw on his "lifetime reserve", the reserve of hospital days a beneficiary can draw upon if he ever needs more than 90 days of hospital care in the same benefit period, he will pay \$36 for each day used, instead of the present \$34 per day. □

Sports Medicine Group Formed

A Central States Chapter of the American College of Sports Medicine has been formed to include the states of Arkansas, Kansas, Missouri, and Oklahoma. The first annual meeting of the new chapter will be held December 16th at Oklahoma State University, Stillwater.

Each chapter has as its primary purpose the implementation at the regional level the objectives of the American College of Sports Medicine.

All physicians interested in sports or team medicine are invited to attend the meeting, scheduled to be held in the Colvin Physical Education Center on the OSU Campus. The first scientific presentation will be by Donald L. Cooper, MD, OSU team physician on the subject of "Effects of Playing Surfaces on Sports Injuries."

Registration is \$2.00 upon arrival at the meeting. Additional information about membership, or a copy of the program for the December meeting, can be obtained from the Secretary/Treasurer: Ben R. Londeree, 36 Rothwell Gym, University of Missouri, Columbia, Missouri 65201.

Other presentations during the meeting will include "Functional Anatomy of the Knee Joint", "Women, Sports and Medicine", and "Diagnosis and Treatment of Knee Injuries."

The afternoon sessions will start with a short, 30 minute, business meeting then will be followed by workshops and discussion groups. □

Alumni Honors OSMA Presidents

It was Oklahoma State Medical Association night October 22 at the annual banquet and dance of the Alumni Association of the University of Oklahoma College of Medicine in Oklahoma City.

Seven OSMA past presidents who are OU medical alumni and another graduate, C. Riley Strong, MD, OSMA president-elect from El Reno, were honored and presented plaques recognizing their contributions to the medical profession.

The seven honorees: Ralph A. McGill, MD, Tulsa, 1950-51 OSMA president, cited posthumously; Joe L. Duer, MD, Woodward, 1963-64; Rex E. Kenyon, MD, Oklahoma City, 1965-66; Ennis M. Gullatt, MD, Ada, 1966-67; Scott Hendren, MD, Oklahoma City, 1968-69; Hillard E. Denyer, MD, Bartlesville, 1969-70; and Ed L. Calhoon, MD, Beaver, 1970-71.

The Presidents' Dinner featuring



John M. Moore, MD, left, Pauls Valley, takes the gavel of the Alumni Association of the University of Oklahoma College of Medicine from outgoing president Robert E. Engles, MD, Durant, at the annual banquet in Oklahoma City. Seated are Paul Sharp, PhD, OU president, and Mrs. Sharp.

favorite recipes of US presidents was planned by Lawrence Rember, as his farewell activity as alumni

executive secretary. He retired October 23 after 13 years in that post. He was the first full-time alumni executive.



OSMA past presidents who are OU College of Medicine graduates were honored at the annual Alumni Association banquet October 22. From left are: Ennis M. Gullatt, MD, Ada; Ed L. Calhoon, MD, Beaver; Joe L. Duer, MD, Woodward; Hillard E. Denyer, MD, Bartlesville; Rex E. Kenyon, MD, and Scott Hendren, MD, both of Oklahoma City. Ralph A. McGill, MD, Tulsa, was cited posthumously.

John M. Moore, MD, Pauls Valley, took office as alumni president, succeeding Robert Engles, MD, Durant.

Other officers elected at the annual meeting were Donald L. Brawner, MD, Tulsa, vice president; Earl M. Bricker, MD, Oklahoma City, secretary; and Curtis Cunningham, MD, Clinton, treasurer.

Following Rember's retirement, H. Leon Snow, former executive director of the Southern California Dental Association, Los Angeles, assumed the new position of director of the OU Health Sciences Center Alumni Office.

Snow is in charge of alumni development in all six of the Health Sciences Center colleges, not just the medical college.

Rember, in addition to his medical alumni work, was involved in governmental relations. □



The Oklahoma University Medical Class of 1927 held its 45th reunion, October 22 in Oklahoma City's Skirvin Hotel. Those in attendance are pictured above. (Top row-left to right) Hervey Foerster, MD, Dan Stough, MD, John Miles, MD, Wesley Mote, MD, Clifford Moore, MD, Gilbert Hyroop, MD. (bottom row - left to right)

Leroy Goodman, MD, Harry Wilkins, MD, Marvin Saddoris, MD, A.M. Brewer, MD, Leslie LeHew, MD.

The class honored Harry Wilkins, MD by awarding him an engraved plaque as the outstanding member of the class and for pioneering neurosurgery in Oklahoma City.

Sixteen Continuing Education Courses Ready for Physicians

Latest calendar of courses being offered by the Office of Continuing Medical Education for the Oklahoma Health Sciences Center lists 16 opportunities for physicians during the next six months. All of the medical education programs for physicians have been granted full approval by the American Medical Association's Council on Medical Education.

The 1972-73 calendar is as follows:

Nov. 29 — Benign Esophageal Disease
Nov. 30, Dec. 1-2 — Surgical Aspects of Gynecology and Obstetrics
Dec. 13 — Voice and Language Disorders

Feb. 22-23 — Hearing Disorders in Children

Mar. 5-9 — Electrocardiography—Its Clinical Application

Mar. 9 — Medical Challenges Shared by the Cardiologist, Nephrologist and Urologist

Mar. 15-16 — Symposia in Ophthalmology and Otolaryngology

Mar. 18-23 — Oklahoma Physicians Spring Retreat and Continuing Medical Education Course (South Padre Island, Texas)

Apr. 2-6 — Clinical Anesthesiology for General Practitioners

Apr. 10-11 — Diagnostic Ultrasound

Apr. 11 — Short Course (Subject to be announced)

May 9 — Recent Advances in Cardiology

May 11 — Association of House Staff Physicians—Annual Meeting

May 18-19 — Eighth Oklahoma Colloquy on Advances in Medicine—Medical Therapeutics

Physicians interested in attending any of the courses offered by the Health Sciences Center should contact the Office of Continuing Medical Education for Physicians, University of Oklahoma Health Sciences Center, P.O. Box 26901, Oklahoma City, Oklahoma 73190. □



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Congress Passes Omnibus Social Security Bill

On October 17 the Congress of the United States passed a legislative act referred to as H.R. -1 and known as the Social Security Amendments of 1972. This omnibus bill makes extensive changes in the Social Security programs, as well as in Medicare, Medicaid, maternal and child health programs.

An indication of how large the bill actually was can be found in the fact there were 583 Senate proposed amendments to the bill as it was passed by the House of Representatives. Over 100 changes in the Medicare, Medicaid, and maternal and child health programs were adopted.

Tax increases to finance the multiple benefits were included in the bill, these increases now supersede tax increases enacted in June when Congress voted a 20% raise in retirement benefits which has now taken affect. Next year's Social Security tax will rise to a total of 5.85 percent of an individual's first \$10,800 income. The wage base would be increased again in 1974 to \$12,000. Likewise, the rate will raise to 6 percent in 1978.

The following, in capsule form, are significant provisions of the bill which might be of interest to physicians:

—Disability beneficiaries: Extension of Medicare to provide benefits for disabled persons receiving monthly cash benefits for at least 24 months under Social Security or Railroad Retirement programs. Those covered include disabled workers, disabled widows and widowers between age 50 and 65, disabled persons 18 and older receiving Social Security benefits for disabilities occurring before age 22.

—Part B Premium: Medicare Part B premium was fixed at \$5.80 per month through fiscal 1973. Part B deductible was increased from \$50 to \$60.

—Payments to health maintenance organizations: Authorization for reimbursement, through a single capitation payment, to qualified HMOs making available Medicare covered services. A qualified organization will have at least 25,000 members, of which not more than half are 65 or older, and will have been in operation at least two years . . . or, in a small or sparsely settled community, will have at least 5,000 members and will be in operation at least three years. As incentives, the organization will be entitled to half of the savings represented by the difference between its cost and average per capita costs in the area for beneficiaries not enrolled in the organization. A limit is placed on the amount of entitlement, however.

—Teaching physicians: Reimbursement for services of teaching physicians to non private Medicare patients are to be made under Part A on a actual cost or "equivalent cost" basis. Exceptions under which fee-for-service may continue, would include payments for Medicare beneficiaries who are bonifide "private patients."

—Termination of payments: HEW Secretary has given authorization to terminate Medicare, Medicaid, and maternal and child health payments to providers of health or medical services found guilty of fraudulent representation, excessive charges or furnishing services in excess of need or of grossly inferior quality. The Secretary is to establish program review teams, in each state, composed of physicians, other professional personnel, and consumer representatives.

—Unnecessary admissions: Utilization Review Committees authorized to notify the physician, patient, and hospital that payment for services by Medicare will cease in three days in not only those cases where the committee finds the hospital or extended care stay is no longer necessary, but also in cases where admission was not necessary.

—Professional Standards Review: Authorize creation of Professional Standards Review Organizations (PSRO), organization representing at least 50% of practicing physicians would assume responsibility in local areas, designated by the Secretary of HEW by January 1, 1974, for comprehensive and ongoing review of services covered under Medicare and Medicaid. Review would be made to determine whether services provided were medically necessary, met appropriate professional standards, and in the case of proposed inpatient services, could be provided on an outpatient basis or more economically in a facility of a different type. Only organizations representing a substantial proportion of physicians would be allowed to establish PSROs until 1976. After 1975 HEW Secretary could contract with other groups for the performance of the review function, but he could enter such contracts only after finding that local professional groups were unable or unwilling to perform the review function. PSROs would initially be limited to the review of health care provided by or in institutions, and could assume review of other services only with the approval of the Secretary.

—Physical Therapy: Authorizes payment for physical therapy services performed in the therapists office.

—Colostomy supplies: Coverage of certain supplies related to colostomies allowed under Medicare.

—Waiver of registered nurse requirement: Authorization to HEW Secretary to waive, under certain conditions, the requirement that a skilled nursing facility in a rural area must engage the services of a registered professional nurse for more than 40 hours a week.

—Chiropractic services under Medicare: Extension of Medicare to include chiropractic services. Includes as a "physician" a chiropractor who is licensed as a chiropractor in his state and meets federal standards,

but is included only for covered services limited to treatment by manual manipulation of the spine "to correct a subluxation demonstrated by xray to exist".

—Chiropractic Services Under Medicaid: Payment of Chiropractors under Medicaid allowed when their services are included in the state plan (not presently included in Oklahoma). Covered services consist of treatment by a means of manual manipulation of the spine.

—Recovery of incorrect payments: A legal presumption will be made that any overpayment discovered after the expiration of three years will have been made without fault on the part of the provider and no collection will be made. Additionally, the Secretary would be authorized to deny claims for reimbursement made after the lapse of a reasonable period of time of not less than one nor more than three years.

—Family Planning Services Mandatory Under Medicaid: Federal funding of family planning services for present and former Welfare recipients of child bearing age and also for those persons likely to become welfare recipients in the absence of such services would be increased by authorizing 90 percent federal funding for state family planning programs. Programs would include both counseling and the provision of medical and social services. A penalty of loss of 1 percent of AFDC matching funds will result where states fail to conform or supply recipients with requested family planning service.

—Laboratory Billing of Patients: Authorization to Secretary to negotiate a payment rate acceptable to laboratories for diagnostic tests, which payment will be considered as full charge for such tests. The negotiated rate would be limited to an amount not to exceed the total payment which would have been made in the absence of such rate. ☐

Photo Contest Set For Annual Meeting

A physician's photography contest has been announced for the OSMA 1973 Annual Meeting in Tulsa. Stephen J. Adelson, MD, General Chairman of the meeting made the announcement.

Set for April 26-28, the OSMA Annual Meeting will be held in the Fairmont-Mayo Hotel and the Tulsa Assembly Center. All photos entered in the contest will be displayed in the meeting's exhibit area in the Assembly Center.

Merchandise certificates will be awarded as prizes for first, second, and third place winners in two categories. . . color and black and white.

Mr. Lewis W. Jarrett, longtime chief photographer for the Tulsa Tribune will judge the contest.

Complete rules for the photo contest will be announced in the near future. ☐



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Two Tulsa Doctors Receive Recognition

Two long-time Tulsa physicians have received appropriate recognition from the Oklahoma State Medical Association. Maurice J. Searle, MD, and Leo Lowbeer, MD, were honored at the October 9th meeting of the Tulsa County Medical Society.

OSMA President Stanley R. McCampbell presented a gold pin to Doctor Searle in recognition of his completion of 50 years in the practice of medicine. The doctor had practiced in Tulsa from 1923 until his retirement last year, specializing in pediatrics.

Doctor Searle is a diplomat of the American Board of Pediatrics, and a member of the American Academy of Pediatrics and numerous other professional organizations. He has served as President of the Tulsa County Medical Society in 1938, and as a member of its Board of Trustees for 18 years. He was a longtime Tulsa delegate to the Oklahoma State Medical Association, and served in many other capacities.

The pediatrician graduated from Jefferson Medical College of Philadelphia in 1920, received his hospital training at St. Joseph's Hospital of Pittsburgh and then entered active practice in Tulsa.

Leo Lowbeer, Tulsa pathologist, received an OSMA Certificate of Life Membership. He was a 1927 graduate of the University of Vienna School of Medicine, Vienna, Austria. He received his specialty training in Vienna Municipal Hospital.

Doctor Lowbeer came to the United States in 1937, and was Chief Pathologist at Hillcrest Medical Center from 1939 until 1967. Since that time he has served as Consulting Pathologist at the hospital. His expertise in forensic medicine is widely known and he is the author of numerous publications of original research and clinical study in many areas of modern medicine.

A Diplomat of the American Board of Pathology, Doctor Lowbeer is a member of many other professional organizations. □



OSMA President Stanley R. McCampbell, MD, presents a gold pin to Maurice J. Searle, MD, (center), retired Tulsa pediatrician in recognition of his completion of 50 years in the practice of medicine. Leo Lowbeer, MD, Tulsa pathologist, looks on after receiving his OSMA certificate of life membership. Presentation was made at the October 9 meeting of the Tulsa County Medical Society.

Physician's Award Honors Kieffer Davis, MD



Kieffer Davis, MD, (right above) Chief Medical Director of Phillips Petroleum Company, Bartlesville received the Physician's Award of the President's Committee on Employment of the Handicapped. Signed by President Richard M. Nixon, the award was presented by Harold Russell, Chairman of the President's Committee. The award stated, "The President of the United States takes pleasure in citing Kieffer Davis, MD, for an outstanding contribution to the welfare and employment of the nation's handicapped men and women."

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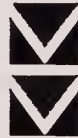
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Program For Physicians Assistants Approved

The first 17 educational programs preparing assistants for primary care physicians have been formally accredited by the American Medical Association's Council on Medical Education.

The action was taken in collaboration with the American Academy of Family Physicians, the American Academy of Pediatrics, the American College of Physicians and the American Society of Internal Medicine.

These programs meet or exceed the *Essentials of an Approved Educational Program for the Assistant to the Primary Care Physician* which were established by the parent organizations and approved by the AMA House of Delegates last Dec.

Programs receiving *Approval* are Alderson-Broaddus College, Phillippi, West Va., Bowman Gray School of Medicine, Wake Forest University, Winston-Salem; The Brooklyn Hospital, Brooklyn, New York; and the Duke University School of Medicine, Durham, NC.

Preliminary Approval was awarded to the Charles R. Drew Postgraduate Medical School and University of California, Los Angeles School of Medicine, Los Angeles; the Emory University School of Medicine, Atlanta, Ga.; the Hahnemann Medical College and Hospital, Philadelphia; Northeastern University, Boston; Phoenix Indian Medical Center, Phoenix; School of Health Care Sciences, USAF, Sheppard Air Force Base, Texas; School of Allied Health Professions, State University of New York at Stony Brook; University of Alabama School of Medicine, Birmingham; and the University of Oklahoma Health Sciences Center, Oklahoma City.

Provisional Approval - New Program was awarded to the Essex Community College, Baltimore County, Md.; Mercy College of Detroit, Detroit; University of Mississippi Medical Center, Jackson; and Western Michigan University, Kalamazoo.

Approval is awarded to operational



James A. Webb, MD, (right) Trustee for District II of the OSMA presents Dewey L. Mathews, MD, Tonkawa general practitioner, with his OSMA Life Membership Certificate.

programs that have graduated students. *Preliminary Approval* is awarded to those programs meeting the *Essential* requirements and which are operational but have not as yet graduated a class of students.

Provisional Approval - New Program is awarded to those programs that are not yet operational but which have progressed in their planning to the point where there is reasonable assurance that the *Essential* requirements will be fulfilled.

Fifteen additional applications for program accreditation are in varying stages of evaluation and will be acted upon by the Council during its November meeting. Reportedly there are approximately 45 educational programs that are operational or in various planning stages which purport to prepare assistants to primary care physicians. Some of these have not yet sought formal accreditation. □

Information Sought On Phony Nurse

Information on the activities and recent employment of a phony nurse is being sought by the Oklahoma Board of Nurse Registration. The woman was recently found guilty of practicing nursing in Oklahoma without a license.

Using the transcript of a registered nurse from Texas, the woman has operated under several different aliases, given four different birth dates, and three different social security numbers.

Anyone having information about the woman should contact the Board of Nurse Registration at Area Code 405, 521-2363. They would like to know if she seeks employment in Oklahoma again, or if anyone has any information about her previously seeking employment or being em-

ployed in Oklahoma.

She was arrested in Seminole County under the name "Mildred Edith Folsom Fleming Barrett". Other names she has known to use include Dee Barrett, Ruth Dorothy McCleery, Lee or Dee McCleery, Ruth Edith Mildred Barrett, Dee Ruth Mildred Edith Folsom, Mildred Barrett, Ruth Dorothy Dixson Barrett McCleery, Dee Ruth McCleery, and Dorothy Barrett McCleery.

She has given four different birth dates: May 5, 1932; May 12, 1925; June 4, 1926; and June 4, 1932. Her birth place is usually listed as Carnegie, Oklahoma. Three different Social Security Numbers have been used: 446-16-1102, 451-28-4112, and 644-10-7922.

The woman is 5'8" or 5'9" in height, 145-150 pounds, caucasian, brown eyes and brown hair.

She has in her possession a transcript from Wilson N. Jones Hospital School of Nursing, Sherman, Texas for Mildred Edith Folsom. ☐

Standard Claim Form Recommended By OSMA

During its May meeting the OSMA House of Delegates unanimously adopted the report of the association's Council on Insurance endorsing the Health Insurance Council's standard claim form for physicians.

The HIC form had been previously approved by the AMA's Council on Medical Services. It is officially designated as the "Attending Physician's Statement".

Previously the OSMA had its own form that had been in use for a number of years. Endorsement of the HIC form was an attempt at standardization to help physician's offices.

The Health Insurance Council is composed of eight associations whose member companies issue more than 90 percent of the health insurance policies written by the insurance companies in the United States. This means that almost all insurance companies will accept, without question, the HIC form.

DEATHS

WALLACE R. COYNER, MD
1905-1972

Wallace R. Coyner, MD, Edmond, died October 22, 1972 at an Edmond Hospital. Doctor Coyner was graduated from the University of Oklahoma in 1947. He was made a life member of the OSMA in 1970.

RAY L. HALL, MD
1890-1972

Long-time Oklahoma physician Ray L. Hall, MD, Enid died September 11, 1972. Doctor Hall practiced in Waynoka for more than 20 years before going to Enid. He retired from the practice of medicine in 1962.

JOHN E. McDONALD, MD
1903-1972

John E. McDonald, MD, Tulsa, died September 28, 1972. Doctor McDonald was graduated from the University of St. Louis in 1926. He was a member of the Southwest Surgical Congress, American Academy of Orthopedic Surgeons and the US chapter of International College of Surgeons. Doctor McDonald was president of the Tulsa County Medical Society in 1949.

RAYMOND L. MURDOCH, MD
1893-1972

Raymond L. Murdoch, MD, Oklahoma City proctologist, died October 16, 1972. A native of Omaha, Nebraska, Doctor Murdoch was graduated from Washington University in St. Louis in 1919. He was a member of the American College of Surgeons and a senior fellow of the American Proctological Society.

ORION C. STANDIFER, MD
1896-1972

Retired Elk City physician, Orion C. Standifer, MD, died September 20, 1972, following an extended illness. Doctor Standifer was a member of the Southern Surgical Association and was past president of the Beckham County Medical Society and a life member of the OSMA. He was graduated from the University of Oklahoma Medical School in 1924. ☐

In many cases the physicians simply use the HIC form, even if the insurance company involved has its own form. They attach the HIC form to the insurance company's form and return it as directed.

The form is available in pads from a number of different printing houses. Physicians are advised to check with their local printers first. The form is available, however, from the J & K Letter Shop, P.O. Box 1097, Shawnee, Oklahoma 74801. ☐

Nation Record Set For Medical School Enrollment

Latest figures indicate there are over 44,000 students enrolled in the

nation's 112 medical schools this fall. Oklahoma University Medical College currently has an enrollment of 536.

Nationwide there were over 13,000 openings in the first year class.

Estimates by the Association of American Medical College indicate that 37 percent of all medical school applicants will be accepted in a first year program somewhere. Organized medicine's goal is a 50 percent acceptance rate.

The number of first year medical school slots available is nearly 1,000 over the number available in 1971.

In mid-September the University of Oklahoma College of Medicine had a total enrollment of 147 Freshmen, 138 Sophomores, 136 Juniors, and 115 Seniors. ☐

Book Reviews

THE KAISER-PERMANENTE MEDICAL CARE PROGRAM. A Symposium. Anne R. Somers, editor. The Commonwealth Fund, New York, New York, 1971. 238 pages.

Recently, a great deal of interest in prepaid group practice and the so-called health maintenance organization (HMO) has developed. The report of the proceedings of the symposium on the Kaiser Permanente System is thus particularly timely. It is a comprehensively written analysis regarding the concept of prepaid group practice.

The discussion ranges from basic philosophy and organization of the Kaiser system to analysis of new approaches to new developments in this field. Since all of the speakers were members of the Kaiser system, the overlapping usually found in symposia when a variety of individuals discuss a common topic is, in general, not present in this report. The major weakness is the lack of depth in the treatment of the various topics.

With the Federal government's stated intent to multiply substantially the number of prepaid group practices, perhaps the most relevant section is that entitled "New Approaches to New Areas."

Harris D. Riley, Jr., MD

QUESTIONS PARENT ASK ABOUT THEIR CHILDREN. By Robert F. Polley. Seattle: Parents Handbooks. 164 pages. \$3.00

This small paperback is written by a practicing pediatrician in Seattle. It is written in a "question and answer" type of presentation, "so that parents can browse through the book and learn in a few minutes what it has to offer on a particular topic." It makes a point of not being as permissive as the well known book by Spock. In general, the market for such a book is new parents who want to know all about their children, their growth progress both normal and abnormal, and what to do in

everyday stress situations. This book skips from subject to subject with such frequency that it tends to be confusing. This book contains certain useful information, but because of the above and its high cost, it is not likely to be a "best seller."

Harris D. Riley, Jr., MD

INTRODUCTION TO NEUROSCIENCE, Edited by Jeff Minckler, MD, PhD, 420 pp with illus., \$22.50. St. Louis, The C.V. Mosby Company., 1972.

This relatively small volume is a

good up-to-date resume of macroscopic and microscopic anatomy, embryology, physiology, and biochemistry of the central and peripheral nervous systems. The book is divided in five parts: gross anatomy, microanatomy, functional neuroscience, neural pathways, and integrated functions. Within this frame the book is organized along somewhat non-traditional lines. For example, the second part (microanatomy) begins with a chapter on electronmicroscopy and is followed by a discussion of developmental biology (embryogenesis and cy-

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togenesis) and tissue culture. This type of approach in which morphology is to a great extent blended with dynamic considerations should be of great value to medical students as well as to a large number of students in other disciplines who need a certain minimum of information about the nervous system. The text material is concise but quite comprehensive. The numerous diagrams and photographs are clear and adequate to illustrate the text.

Introduction to Neuroscience is certainly a welcome addition to the library of those interested in obtain-

ing an integrated view of the structure and functioning of the nervous system.

J. C. Logas, MD

TEXTBOOK FOR LABORATORY ASSISTANTS. Irwin A. Oppenheim. Paperback. 149 pages and 79 illustrations. C. V. Mosby, St. Louis, Mo. 1972. Price \$4.90.

The author states he wrote this text to provide those studying to be Certified Laboratory Assistants a *beginning* text which is not beyond their level of comprehension. The contents are divided into "conventional" chapters such as urinalysis,

microbiology, serology, hematology, etc. The author intended that the text would not supplant other sources for descriptions of methodology or to provide an indepth discussion of tests or diseases. He seems to have accomplished his goal.

The book is printed on good paper and the type is easily read. It is a paperback edition, and the price, therefore, is modest enough to be well within reach of these students.

Recognizing the objectives of the book, it is recommended as a good source for beginning information for CLA and perhaps for Medical Technology students.

A. William Shafer, MD ☐

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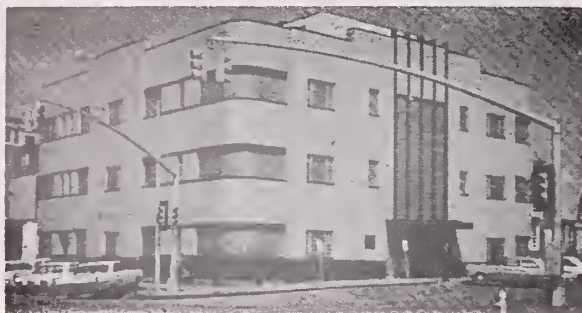
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of the Oklahoma State Medical Association

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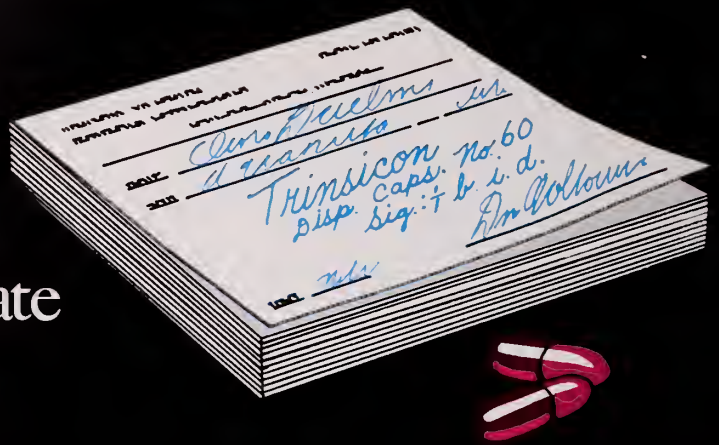
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Contraindications and Precautions: Anemia is a manifestation that requires appropriate investigation to determine its cause or causes.

Folic acid alone is unwarranted in the treatment of pure vitamin-B₁₂-deficiency states, such as pernicious anemia. Indeed, the use of folic acid in large doses in pernicious anemia without adequate vitamin B₁₂ may result in hematologic remission but neurological progression.

As with all preparations containing intrinsic factor, resistance may develop in some cases of pernicious anemia to the potentiation of absorption of physiological doses of vitamin B₁₂. If resistance occurs, parenteral therapy, or oral therapy with so-called massive doses of vitamin B₁₂, may be necessary for adequate treatment of the patient. No single regimen fits all cases, and the status of the patient observed in follow-up is the final criterion for adequacy of therapy. Periodic clinical and laboratory studies are considered essential and are recommended.

In extremely rare instances, skin rash suggesting allergy has been noted following the oral administration of liver-stomach material. Allergic sensitization has been reported following both oral and parenteral administration of folic acid.

Hemochromatosis and hemosiderosis are contraindications to iron therapy.

Adverse Reactions: In rare instances, iron in therapeutic doses produces gastrointestinal reactions, such as diarrhea or constipation. Reducing the dose and administering it with meals will minimize these effects in the iron-sensitive patient.

Dosage: One Pulvule twice a day. (Two Pulvules daily produce a standard response in the average uncomplicated case of pernicious anemia.)

How Supplied: Pulvules Trinsicon® (hematinic concentrate with intrinsic factor, Lilly), in bottles of 60 and 500 and in Identidose® (unit dose medication, Lilly) in boxes of 100.

[000077]

Trinsicon®

Hematinic Concentrate with Intrinsic Factor

A Comprehensive Hematinic

Additional information available to the profession on request.

Eli Lilly and Company
Indianapolis, Indiana 46206





Nose clear all knight

For upper respiratory allergies and infections including the common cold, Dimetapp Extentabs® effectively relieve the stuffiness, drip and congestion all night and all day long on just one Extentab every 12 hours. For most patients drowsiness or overstimulation is unlikely.

Dimetapp Extentabs®

Dimetane® (brompheniramine maleate), 12 mg, phenylephrine HCl, 15 mg, phenylpropanolamine HCl, 15 mg

INDICATIONS: Dimetapp Extentabs are indicated for symptomatic relief of allergic manifestations of upper respiratory illnesses, such as the common cold, seasonal allergies, sinusitis, rhinitis, conjunctivitis and otitis. In these cases it quickly reduces inflammatory edema, nasal congestion and excessive upper respiratory secretions, thereby affording relief from nasal stuffiness and postnasal drip.

CONTRAINDICATIONS: Hypersensitivity to antihistamines of the same chemical class. Dimetapp Extentabs are contraindicated during pregnancy and in children under 12 years of age. Because of its drying and thickening effect on the lower respiratory secretions, Dimetapp is not recommended in the treatment of bronchial asthma.

Also, Dimetapp Extentabs are contraindicated in concurrent MAO inhibitor therapy.

WARNINGS: *Use in children:* In infants and children particularly, antihistamines in overdosage may produce convulsions and death.

PRECAUTIONS: Administer with care to patients with cardiac or peripheral vascular diseases or hypertension. Until the patient's response has been determined, he should be cautioned against engaging in operations requiring alertness such as driving an automobile, operating machinery, etc. Patients receiving antihistamines should be warned against possible additive effects with CNS depressants such as alcohol, hypnotics, sedatives, tranquilizers, etc.

ADVERSE REACTIONS: Adverse reactions to Dimetapp Extentabs may include hypersensitivity reactions such as rash, urticaria, leukopenia, agranulocytosis and thrombocytopenia; drowsiness, lassitude, giddiness, dryness of the mucous membranes, tightness of the chest, thickening of bronchial secretions, urinary frequency and dysuria, palpitation, hypotension/hypertension, headache, faintness, dizziness, tinnitus, incoordination, visual disturbances, mydriasis, CNS-depressant and (less often) stimulant effect, anorexia, nausea, vomiting, diarrhea, constipation, and epigastric distress.

HOW SUPPLIED: Light blue Extentabs in bottles of 100 and 500.

A-H-ROBINS

A.H. Robins Company
Richmond, Va. 23220



**for
today's
pain...**

**memory of
yesterday's
pain...**

**apprehension over
tomorrow's
pain—**


For the patient with a terminal illness, PAIN past, present, and future can dominate his thoughts until it becomes almost an obsession. The more he is aware of the pain he is now experiencing, the more difficult it is to erase his memory of yesterday's pain, and to allay his fearful anticipation of tomorrow's pain. Surely the last thing this patient needs is an analgesic containing caffeine to stimulate the senses and heighten pain awareness. A far more logical choice is Phenaphen with Codeine. The sensible formula provides $\frac{1}{4}$ grain of phenobarbital to take the nervous "edge" off, so the rest of the formula can help control the pain more effectively. Don't you agree, Doctor, that psychic distress is an important factor in most of your terminal and long-term convalescent patients?

the analgesic formula that calms instead of caffeinates

Phenaphen[®] with Codeine

Phenaphen with Codeine No. 2, 3, or 4 contains: Phenobarbital ($\frac{1}{4}$ gr.), 16.2 mg. (warning: may be habit forming); Aspirin ($2\frac{1}{2}$ gr.), 162.0 mg.; Phenacetin (3 gr.), 194.0 mg.; Codeine phosphate, $\frac{1}{4}$ gr. (No. 2), $\frac{1}{2}$ gr. (No. 3) or 1 gr. (No. 4) (warning: may be habit forming).

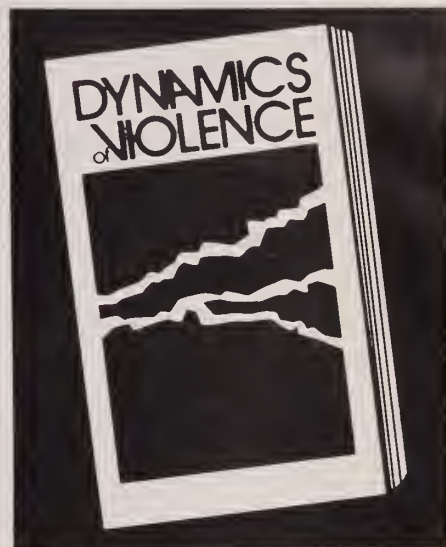
Indications: Provides relief in severer grades of pain, on low codeine dosage, with minimal possibility of side effects. Its use frequently makes unnecessary the use of addicting narcotics. **Contraindications:** Hypersensitivity to any of the components. **Precautions:** As with all phenacetin-containing products, excessive or prolonged use should be avoided. **Side effects:** Side effects are uncommon although nausea, constipation and drowsiness may occur. **Dosage:** Phenaphen No. 2 and No. 3—1 or 2 capsules every 3 to 4 hours as needed; Phenaphen No. 4—1 capsule every 3 to 4 hours as needed. For further details see product literature.

 Phenaphen with Codeine is now classified in Schedule III, Controlled Substances Act of 1970. Available on written or oral prescription and may be refilled 5 times within 6 months, unless restricted by state law.

A. H. Robins Company, Richmond, Virginia

DYNAMICS of VIOLENCE

Brief, brilliant studies drawn from a close, often painful scrutiny of human violence



Jan Fawcett's superbly edited book takes you on an exploration into this age of violence. Nightmarish cases from contemporary history...war, bombings, assassination, mass murder, rape, arson, riots...are the backdrops against which eminent psychiatrists discuss violence and aggression.

Immensely revealing and readable, *Dynamics of Violence* examines violent aggression in terms of historical and social dimensions in our national history, clinical case studies of violent individuals, and clinical research investigations.

Order your copy today! Send your remittance to the American Medical Association, 535 N. Dearborn St., Chicago, Ill. 60610.

SMJ 11/72

Send me _____ copy(s) of *Dynamics of Violence* priced at \$3.95. (OP-240.) My payment of \$ _____ is enclosed.

Name _____

Address _____

City/State/Zip _____



When you select this familiar antibiotic for IV infusion you have available a broad dosage range that hospitalized patients may need.

Intravenous Lincocin (lincomycin hydrochloride, Upjohn), with its 1.2 to 8 grams/day dosage range, covers many serious and even life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. Lincocin IV therefore can be as useful in your hospitalized patients as its IM use has proved to be in your office patients. As with all antibiotics, *in vitro* susceptibility studies should be performed.

1.2 to 8 grams/day IV dosage range:

Most hospitalized patients with uncomplicated pneumonias respond satisfactorily to 1.2 to 1.8 grams/day of Lincocin IV. These doses may have to be increased for more serious infections.

In life-threatening situations as much as 8 grams/day has been administered intravenously to adults.

In usual IV doses, Lincocin (lincomycin hydrochloride, Upjohn) should be diluted in 250 ml or more of normal saline solution or 5% glucose in water. But when 4 grams or more per day is given, Lincocin should be diluted in not less than 500 ml of either solution, and the rate of administration should not exceed 100 ml/hour. Too rapid intravenous administration of doses exceeding 4 grams may result in hypotension or, in rare instances, cardiopulmonary arrest.

Effective gram-positive antibiotic:

Lincocin IV is effective in respiratory tract, skin and soft-tissue, and bone



infections caused by susceptible strains of pneumococci, streptococci, and staphylococci, including penicillin-resistant strains. Staphylococcal strains resistant to Lincocin (lincomycin hydrochloride, Upjohn) have been recovered. Before initiating therapy, culture and susceptibility studies should be performed. Lincocin has proved valuable in treating patients hypersensitive to penicillin or cephalosporins, since Lincocin does not share antigenicity with these compounds. However, hypersensitivity reactions have been reported, some of these in patients known to be sensitive to penicillin.

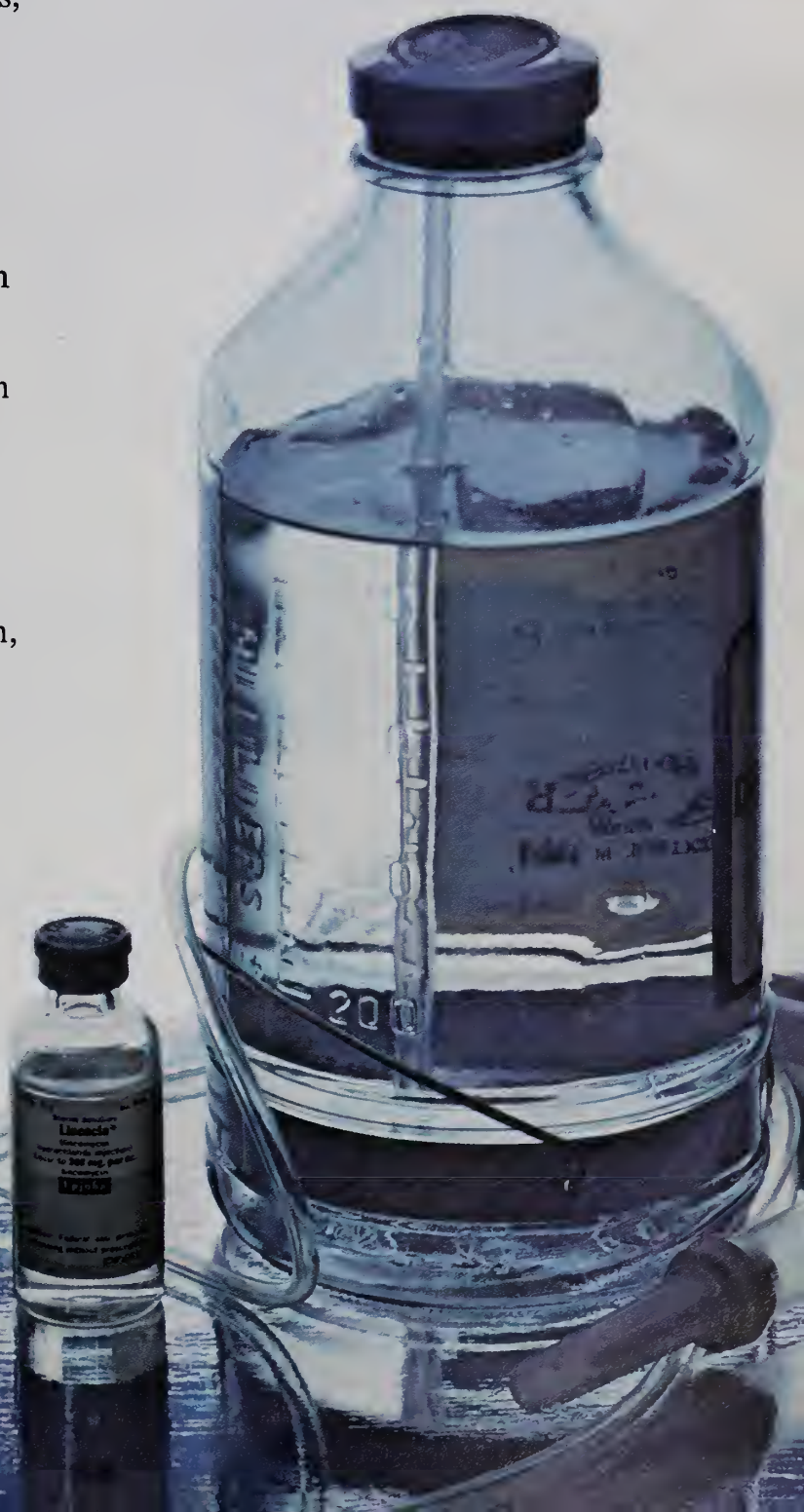
Well tolerated at infusion site: Lincocin intravenous infusions have not produced local irritation or phlebitis, when given as recommended. Lincocin is usually well tolerated in patients who are hypersensitive to other drugs. Nevertheless, Lincocin should be used cautiously in patients with asthma or significant allergies.

In patients with impaired renal function, the recommended dose of Lincocin should be reduced to 25–30% of the dose for patients with normal kidney function. Its safety in pregnant patients and in infants less than one month of age has not been established.

Lincocin may be used with other antimicrobial agents: Since Lincocin is stable over a wide pH range, it is suitable for incorporation in intravenous infusions; it also may be

administered concomitantly with other antimicrobial agents when indicated. However, Lincocin should not be used with erythromycin, as *in vitro* antagonism has been reported.

Lincocin®
Sterile Solution (300 mg per ml)
(lincomycin hydrochloride, Upjohn)
For further prescribing information, please see following page.





Sterile Solution (300 mg. per ml.)

Lincocin[®]

(lincomycin hydrochloride, Upjohn)

Up to 8 grams per day by IV infusion for
hospitalized patients with life-threatening infections.

Lincocin is effective in infections due to
susceptible strains of streptococci, pneumococci,
and staphylococci. As with all antibiotics,
in vitro susceptibility studies should be performed.

Each
preparation
contains:

Lincomycin
hydrochloride
monohydrate
equivalent to
lincomycin base

250 mg Pediatric Capsule 250 mg
500 mg Capsule 500 mg
*Sterile Solution per 1 ml 300 mg
Syrup per 5 ml 250 mg
*Contains also: Benzyl Alcohol 9 mg; and,
Water for Injection—q.s.

Lincocin (lincomycin hydrochloride) is indicated in infections due to susceptible strains of staphylococci, pneumococci, and streptococci. *In vitro* susceptibility studies should be performed. Cross resistance has not been demonstrated with penicillin, ampicillin, cephalosporins, chloramphenicol or the tetracyclines. Some cross resistance with erythromycin has been reported. Studies indicate that Lincocin does not share antigenicity with penicillin compounds.

CONTRAINDICATIONS: History of prior hypersensitivity to lincomycin or clindamycin. Not indicated in the treatment of viral or minor bacterial infections.

WARNINGS: CASES OF SEVERE AND PERSISTENT DIARRHEA HAVE BEEN REPORTED AND HAVE AT TIMES NECESSITATED DISCONTINUANCE OF THE DRUG. THIS DIARRHEA HAS BEEN OCCASIONALLY ASSOCIATED WITH BLOOD AND MUCUS IN THE STOOLS AND HAS AT TIMES RESULTED IN AN ACUTE COLITIS. THIS SIDE EFFECT USUALLY HAS BEEN ASSOCIATED WITH THE ORAL DOSAGE FORM BUT OCCASIONALLY HAS

BEEN REPORTED FOLLOWING PARENTERAL THERAPY. A careful inquiry should be made concerning previous sensitivities to drugs or other allergens. Safety for use in pregnancy has not been established and Lincocin (lincomycin hydrochloride) is not indicated in the newborn. Reduce dose 25 to 30% in patients with severe impairment of renal function.

PRECAUTIONS: Like any drug, Lincocin should be used with caution in patients having a history of asthma or significant allergies. Overgrowth of nonsusceptible organisms, particularly yeasts, may occur and require appropriate measures. Patients with pre-existing monilial infections requiring Lincocin therapy should be given concomitant antimonilial treatment. During prolonged Lincocin therapy, periodic liver function studies and blood counts should be performed. Not recommended (inadequate data) in patients with pre-existing liver disease unless special clinical circumstances indicate. Continue treatment of β -hemolytic streptococci infections for 10 days to diminish likelihood of rheumatic fever or glomerulonephritis.

ADVERSE REACTIONS: *Gastrointestinal*—Glossitis, stomatitis, nausea, vomiting. Persistent diarrhea, enterocolitis, and pruritus ani. *Hemopoietic*—Neutropenia, leukopenia, agranulocytosis, and thrombocytopenic purpura have been reported. *Hypersensitivity reactions*—Hypersensitivity reactions such as angioneurotic edema, serum sickness, and anaphylaxis have been reported, sometimes in patients sensitive to penicillin. If allergic reaction occurs, discontinue drug. Have epinephrine, corticosteroids, and antihista-

mines available for emergency treatment. *Skin and mucous membranes*—Skin rashes, urticaria, vaginitis, and rare instances of exfoliative and vesiculobullous dermatitis have been reported. *Liver*—Although no direct relationship to liver dysfunction is established, jaundice and abnormal liver function tests (particularly serum transaminase) have been observed in a few instances. *Cardiovascular*—Instances of hypotension following parenteral administration have been reported, particularly after too rapid IV administration. Rare instances of cardiopulmonary arrest have been reported after too rapid IV administration. If 4.0 grams or more administered IV, dilute in 500 ml of fluid and administer no faster than 100 ml per hour. *Special senses*—Tinnitus and vertigo have been reported occasionally. *Local reactions*—Excellent local tolerance demonstrated to intramuscularly administered Lincocin (lincomycin hydrochloride). Reports of pain following injection have been infrequent. Intravenous administration of Lincocin in 250 to 500 ml of 5% glucose in distilled water or normal saline has produced no local irritation or phlebitis.

HOW SUPPLIED: 250 mg and 500 mg Capsules—bottles of 24 and 100. *Sterile Solution*, 300 mg per ml—2 and 10 ml vials and 2 ml syringe. *Syrup*, 250 mg per 5 ml—60 ml and pint bottles.

For additional product information, consult the package insert or see your Upjohn representative.

MED B-6-S (KZL-7) JA71-1631

The Upjohn Company
Kalamazoo, Michigan 49001

Upjohn

The science of treating gas pain

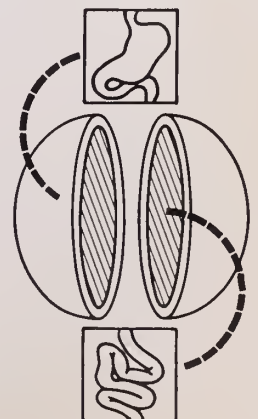
1. When gas is *entrapped* in the G.I. tract, it can cause pain severe enough to mimic that of peptic ulcer, angina pectoris, or myocardial infarction.^{1,2} **2.** Most of the gas symptoms brought to your attention will be due to gas trapped in the intestines, not the stomach. **3.** The source of most G.I. gas is air-swallowing, often an anxiety response of which the patient is unaware.

^{new} PHASIL[®] treats gas pain scientifically

1. Phasil is the only single-entity simethicone tablet with measured medication for both stomach and intestine. Phasil's protected inner core releases 40 mg. of *specially-activated* simethicone in the intestines, the most common site of gas entrapment. **2.** Phasil also releases 20 mg. of *specially-activated* simethicone while in transit through the stomach, for immediate dispersion of any gas accumulated there. **3.** Phasil is safe: no systemic effects, no untoward reactions, no contraindications.

Sig.: One Phasil tablet before meals and at bedtime provides reliable relief of gas pain, bloating and distention. Available in bottles of 100 tablets.

References: **1.** Roth, J. L.: *Ann. N.Y. Acad. Sci.* 150:109, Feb. 26, 1968. **2.** Reich, N. E., and Fremont, R. E. (eds.): *Chest Pain*, The Macmillan Company, New York, 1961, p. 348.



Reed & Carnrick/Kenilworth, N.J. 07033



Antivert[®] (meclizine HCl) for vertigo*

...and then on to Venice

- Indicated in the management of nausea, vomiting and dizziness associated with motion sickness.
- Found useful in the management of vertigo associated with diseases affecting the vestibular system.
- Available as Antivert[®] (12.5 mg. meclizine HCl) blue and white scored tablets and also as Antivert[®]/25 (25 mg. meclizine HCl) yellow and white scored tablets.

*INDICATIONS. Based on a review of this drug by the National Academy of Sciences-National Research Council and/or other information, FDA has classified the indications as follows:

Effective: Management of nausea and vomiting and dizziness associated with motion sickness.

Possibly Effective: Management of vertigo associated with diseases affecting the vestibular system.

Final classification of the less than effective indications requires further investigation.

CONTRAINDICATIONS. Administration of Antivert during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12th-15th day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Usage in Children: Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy: See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

ROERIG 

A division of Pfizer Pharmaceuticals
New York, New York 10017

HEALTH EDUCATION THE KEY TO IMPROVING THE QUALITY OF LIFE

Health and the search therefor is the guiding force in the lives of the doctors of Oklahoma. Are we, wives of these men, involved in the responsibility of improving the health in our community?

The Health Education Conference sponsored by the AMA and the auxiliary made the first step in defining our role in Health Education as the key to improving the quality of life for everyone.

Mrs. Wendell T. Roller, Chairman, pointed out that the scope of health education goes far beyond knowledge of health practices to include larger issues of human attitudes. Ecology has been forced into the back seat by the administration according to Martin Lagronsky, speaker. Others from the ghetto told of their health needs, child care, family planning and mobile health units in the inner city. George Reeves speaking for the aged, spoke of their needs in changing concepts of how to cope with each day.

Eric Schaps, professor of Child Psychology and Director of Alternatives, Inc., an alternate to drug abuse, led a panel discussion in which reasons for the failure of many traditional drug education programs came to light. Surveys show that the students know more about drugs than their teachers; only "good" is pointed out on the street in contrast to "bad" in drug education; "Professionals" have an aura of mysticism and truth which one finds hard to reject. The PhD or someone heavy with credentials is likely to turn off his young audience. We must make our information realistic and hu-

manistic so youth will relate with it and use it.

These are the challenges of Health Education.

Where are you needed in your community? An excellent way to define this is The Survey of Community Health Resources, available from your local or state Community Health Chairman. This concise survey will give you and your auxiliary a picture of your health community. You may discover some overlapping and many unmet needs. You will know exactly in which direction to move to improve things locally.

The fine Package Programs available from the AMA can get you moving. Consideration might be given to a program on Teenage Nutrition. Pamphlets are available and a workshop in your high school can bring interest and publicity to this neglected area.

The aim in building sound attitudes about health is to educate people away from ignorance and neglect but at the same time try to avoid turning them into worriers, hypochondriacs and neurotics. Sound educational programs by your auxiliary can accomplish this aim. Give of yourself intelligently in time, talent, resources and transportation. Improve the quality of your own life.—Mrs. Harvey Randall, State Chairman □

* * *

The Auxiliary page which appeared in the October, 1972 issue was written by Mrs. Scott Hendren, Legislative chairman.

Medicare now requires MDs to personally document hospital calls. A hospital rule that physicians are to visit their patients daily will not be considered sufficient evidence of visits made. Acceptable evidence is the physician's progress notes on the hospital record for the day of the visit, or a nurse's note indicating that he visited the patient on that day. If such documentary evidence is lacking, either the physician or the patient may, at some future date, be forced to refund Medicare payments already made.

Michigan Medical Society came up with some interesting figures. In 1971 private practitioners had 1.5 billion patient contacts, a record number and a 2 percent increase from 1970. Hospital contacts increased 5 percent, with office visits declining approximately the same amount. Family practitioners saw an average of 21.8 patients per day in 1970, as compared to 17.6 contacts for all doctors. Pediatricians registered the largest number of daily contacts as 24.3, with half of these under the age of 2. The average doctor saw more infective and parasitic disorders . . . up 13 percent, disorders of bones and organs of movement . . . up 8 percent, mental disorders . . . up 5 percent, and neoplasms . . . up 5 percent than ever before.

Federal Employees Health Benefits Program, administered nationally by Blue Cross-Blue Shield, will see a premium rate reduction between 10 and 15 percent next year. Information on the planned reduction followed news that the program expects to have a \$64 million surplus in 1972. Interestingly enough Blue Cross and Blue Shield had asked for a 34 percent premium rate increase last December. The Price Commission rolled that request back to 22 percent before granting it.

The unfortunate inclusion of chiropractors under Medicare when Congress passed HR 1 may have one beneficial effect. For many years the medical profession has been wondering just exactly what a "subluxation" really was. In order for a chiropractor to collect Medicare payments he must limit his therapy to manual manipulation of the spine in order to correct a "subluxation demonstrated by xray to exist". On several oc-

casions chiropractors have been asked to view the same xray and to point out the subluxation, if there was one on it. Seldom did two of them point out the same area.

Hinting that national health insurance may become an early and big issue in the 93rd Congress, Senator Russell B. Long (D-La.), Chairman of the Senate Finance Committee, sharply criticized the Kennedy-Labor bill on two separate occasions. He pointed out that if such a sweeping bill were adopted, it might be necessary to increase income taxes by as much as 50 percent. Long said that any new government program should concentrate on helping people who can't help themselves and those involved in catastrophic situations. He said "There simply is no reason to fund federal health insurance for those people who can afford to pay their own way."

Oregon physicians will elect their three delegates to the AMA by popular ballot starting next fall. OMA members have chosen their general officers by mail ballot for the past two years and is the second state society to opt for direct election of AMA delegates. California Medical Association was the first.

A not so helpful program designed to cut Medicaid abuse has actually increased hospitals' costs in Illinois. The Illinois Hospital Association reports that a Hospital Admissions and Surveillance Program (HASP) was instituted to reduce costs for Medicaid patients by uncovering unnecessary admissions and excessive lengths of stay. So far this program is costing Cook County Hospital \$4 in administrative costs for each \$1 saved. Other Illinois hospitals report similar experiences. The Illinois Foundation for Medical Care, the arm of the Illinois State Medical Society that runs HASP, disputes the Hospital Association's finding. □

Will his return to work mean the return of undue psychic tension?



When it's mandatory to keep the post-coronary patient calm, consider Valium (diazepam).

Although he's promised to take it easy back on the job, you know he's going back to the same stressful circumstances that may have contributed to his hospitalization. If he experiences excessive anxiety and tension because of overreaction to stress, your prescription for Valium can bring relief. During the period of readjustment Valium can quiet undue anxiety.

For moderate states of psychic tension, 5-mg or 2-mg Valium tablets *b.i.d.* to *q.i.d.* can usually provide reliable relief. For severe tension/anxiety states, the 10-mg tablets often produce desired results.

The most commonly reported side effects are drowsiness, ataxia and fatigue. Until individual response is determined, caution patient against driving or operating dangerous machinery.

Valium® (diazepam)

For the tense cardiac patient who must be kept calm

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures.

Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision.

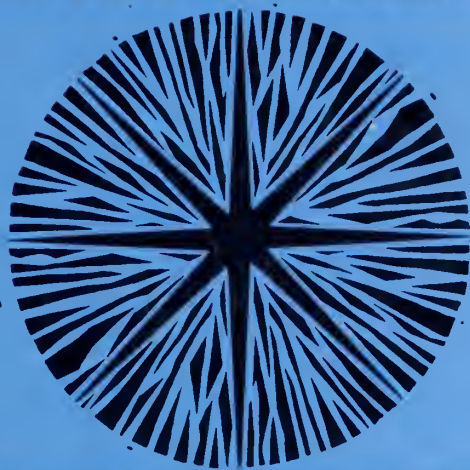
Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

Dosage: Individualize for maximum beneficial effect. **Adults:** Tension, anxiety and psychoneurotic states, 2 to 10 mg *b.i.d.* to *q.i.d.*; alcoholism, 10 mg *t.i.d.* or *q.i.d.* in first 24 hours, then 5 mg *t.i.d.* or *q.i.d.* as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg *t.i.d.* or *q.i.d.*; adjunctively in convulsive disorders, 2 to 10 mg *b.i.d.* to *q.i.d.* **Geriatric or debilitated patients:** 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) **Children:** 1 to 2½ mg *t.i.d.* or *q.i.d.* initially, increasing as needed and tolerated (not for use under 6 months).

Supplied: Valium® (diazepam) Tablets, 2 mg, 5 mg and 10 mg; bottles of 100 and 500. All strengths also available in Tel-E-Dose® packages of 1000.

ROCHE

Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, N.J. 07110



*And there were, in the same country,
shepherds keeping watch over their
flocks by night. And an angel of the Lord
appeared to them and the glory of the Lord
shone round them. The angel said to
them, "Be not afraid for behold, I bring
you good tidings of great joy..."*





Everybody experiences psychic tension.



Most people can handle this tension.



Some people develop excessive psychic tension and need your counseling,



and a few may need counseling
and the psychotropic action of Valium® (diazepam).

Before deciding to make Valium (diazepam) part of your treatment plan, check on whether or not the patient is presently taking drugs and, if so, what his response has been. Along with the medical and social history, this information can help you determine initial dosage, the possibility of side effects and the ultimate prospects of success or failure.

While Valium can be a most helpful adjunct to your counseling, it should be prescribed only as long as excessive psychic tension persists and should be discontinued when you decide it has accomplished its therapeutic task. In general, when dosage guidelines are followed, Valium is well tolerated (see Dosage). For convenience it is available in 2-mg, 5-mg and 10-mg tablets.

Drowsiness, fatigue and ataxia have been the most commonly reported side effects.

Until response is determined, patients receiving Valium should be cautioned against engaging in hazardous occupations requiring complete mental alertness, such as driving or operating machinery.



Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, N.J. 07110

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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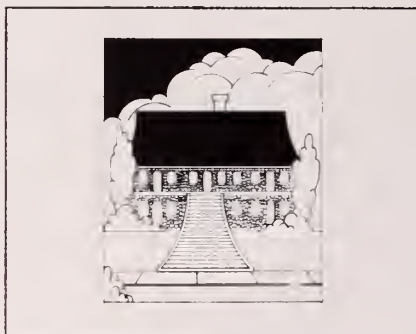
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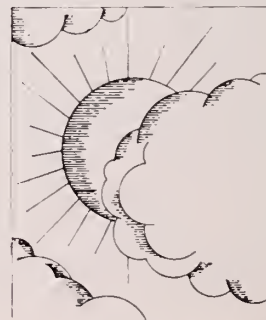
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—George Sarton, from "The History of Medicine Versus the History of Art"

**Are combination drug
products useful in treatment
involving concomitant use
of two or more drugs?**

Opinion

**Results of a questionnaire to
7,000 physicians:**

62.9%

**Believe combination drug
products are useful.**

13.8%

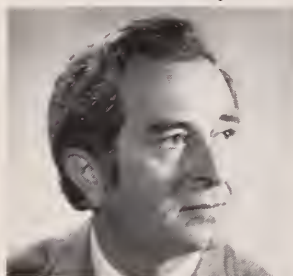
**Do not believe combination drug
products are useful.**

Are combination drug products useful in treatment involving concomitant use of two or more drugs?

Opinion & Dialogue

Doctor of Medicine

Louis Lasagna, M.D.
Professor and Chairman
Department of
Pharmacology & Toxicology
University of Rochester
School of Medicine
and Dentistry



Obviously, many drugs are given concomitantly. Whether it makes sense to combine medications in one preparation, be it capsule, tablet, or liquid, is a question that can be answered only by examining the advantages and disadvantages in the individual case.

Among the advantages is, first of all, convenience. The more medications that are taken concurrently and the more complicated the directions, the less likely the patient is to take medications accurately. From the standpoint of convenience and accuracy, and economy as well, you can make an important case for putting medications together in one preparation, as long as they are compatible.

By the same token, when you prescribe a properly tested and rational combination, you should have less worry about pharmaceutical or pharmacological compatibility — and about reasonable dosage ratios as well. Compatibility of the formulation should be demonstrated in the laboratory and clinic before the product is available for prescription—which is more than can usually be said for

the physician's own spontaneous creations. And, the dosage ratios employed in rational precompounded combinations are designed to meet the needs of substantial numbers of "typical" patients.

There is no doubt that many "atypical" patients are to be found, and for them the prefabricated combination must be rejected. But that hardly argues for eliminating rational combinations from the market. Think, for example, of the problems that would arise if the components of widely accepted combinations, like the oral contraceptives and the diuretic-antihypertensives, always had to be prescribed, purchased and ingested separately.

One disadvantage that comes to mind is some doctors' unawareness of the ingredients a given combination contains. For example, a doctor might know that a patient is allergic to aspirin but forget that a certain analgesic mixture, which he knows only by its trade name, contains aspirin. His prescription, then, causes considerable discomfort, to say the least. This problem is a function of physician education, rather than of combination therapy as such. Improving doctors' knowledge about all medicaments they prescribe is a problem that deserves tackling on its own.

Another accusation leveled at combination drugs is that they encourage sloppiness of diagnosis and treatment. In many cases, however, a combination may prove to be the most effective choice. A good ex-

ample of the usefulness of combinations appears in a recent article in the *Journal of Chronic Diseases* on the efficacy and side effects of an antihypertensive containing three ingredients, in which the track records of the combination drug and the individual ingredients were compared. Interestingly enough, whether the drugs were given individually or together, incidence and severity of side effects were the same. But blood pressure control was invariably better when the drugs were taken in one combination tablet than when they were taken separately (in "titratable" dosage) or in two or three different tablets.

Deciding which combinations constitute rational therapy obviously leads to a discussion of who is to determine which should be used and which should not. Realistically, I think combinations should be evaluated somewhat differently if they are old and established or new and untried.

In today's regulatory atmosphere, there is no possibility of a new combination being put on the market without a substantial amount of acceptable evidence in the form of controlled trials that show it to be safe and efficacious. On the other hand, I believe a different set of standards should apply to combination preparations that have been around for a long time. In other words, physician acceptance over a long period should be given some weight as evidence of the efficacy and safety of these drugs.

The FDA, however, does not seem to share this attitude. It often requires, for these older products, controlled trials that will monopolize the time of already overtired investiga-

tors and cost a great deal of money. I wish we could agree on a "grandfather clause" approach to preparations that have been in use for a number of years and that have an apparently satisfactory track record.

For example, I think some of the antibiotic combinations that were taken off the market by the FDA performed quite well. I am thinking particularly of penicillin-streptomycin combinations that patients—especially surgical patients—were given in one injection. This made for less discomfort for the patient, less demand on nurses' time, and fewer opportunities for dosage errors. To take such preparation off the market doesn't seem to be good medicine, unless actual usage showed a great deal of harm from the injection (rather than the proper use) of the combination.

The point that should be emphasized is that there are both rational and irrational combinations. The real question is, who should determine which is which? Obviously, the FDA must play a major role in making this determination. In fact, I don't think it can avoid taking the ultimate responsibility, but it should enlist the help of outside physicians and experts in assessing the evidence and in making the ultimate decision.

Maker of Medicine

W. Clarke Wescoe, M.D.
President
Winthrop Laboratories



If two medications are used effectively to treat a certain condition, and it is known that they are compatible, it clearly is useful and convenient to provide them in one dosage form. It would make no sense, in fact it would be pedantic, to insist they always be prescribed separately. To avoid the appearance of pedantry, the "expert" decries the combination because it is a fixed dosage form. When the "expert" invokes the concept of fixed dosage form he obscures the fact that single-ingredient pharmaceutical preparations are also fixed dosage forms. By a singular semantic exercise he implies a pejorative meaning to the term "fixed dose" only when he uses it with respect to combinations. What is ignored is the simple fact that only in the rarest of circumstances does any physician attempt to titrate an exact therapeutic response in his patient. It is quite possible that some aches and pains will respond to 500 mg. of aspirin yet that fact does not militate against the usual dose being 650 mg.

The other semantic ploy often called into play is to describe a combination product as rational or irrational.

Take antibiotic mixtures, the source of much of the criticism generated against

combinations generally. Obviously, no one should be exposed willy-nilly to the potential side effects of two or three antibiotics when only one is needed. At the same time there are cases where it is prudent to prescribe more than one. The clinician is the judge in these circumstances, as he should be.

There is no clear definition of the word rational. Most persons, I suppose, would find it synonymous with reasonable, but in many circumstances it may best be defined as the opinion of those in power at the moment.

Other factors govern combination therapy, not the least of which has been its broad use by practicing physicians anxious to achieve convenience in prescribing, to reduce medication error, and to save money for their patients. Combinations clearly have met the test on all three counts.

I have been impressed by studies showing that the rate of error climbs markedly with the number of medications to be taken, even with sophisticated patients. When medically justified, therefore, this factor alone supports the logic of combination therapy.

The cost argument for combinations appears to be irrefutable. In 1971, R. A. Gosselin studied the 71 combination products (excluding oral contraceptives) among the 200 most prescribed drugs. The study found that if all 71 products were discontinued, and if each ingredient in these combinations were prescribed separately, the price of medicines to patients would jump by \$443.2 million on a national basis! At a time when the cost of medical care is under so much fire, it would be nonsensical to boost costs without clearly irre-

futable medical reasons.

The part played by government on this question, of course, is fundamental. The FDA should play a role in determining which combinations are reasonable. That role, as defined by law and regulation, is to ensure that any medication on the market is safe and effective in line with its label claims. Certainly combinations are entitled to as much consideration as single entities—neither more nor less. So long as the addition of one drug to another does not make either less safe, or less effective, so long as they are compatible in a formulation, we have a reasonable product. It makes no sense to recommend the use of two products for certain conditions and to deny their being combined in a single form. An unhappy side effect of the problem concerns the efficacy panel discussions of many products submitted for review. The term "effective, but" has been freely interpreted to mean "ineffective" in toto, regardless of the merit of the individual drugs. This interpretation has placed numerous useful combination products in needless jeopardy.

In reading the actual reports of the review panels, it seems clear that some of the ratings were based less on scientific research and clinical observation than on the "informed" opinions of the panelists. These "informed" opinions were accepted at face value, while

the "informed" opinions of others who had used the products were rejected. All of this put combination products into a sort of scientific never-never land.

It should be kept in mind by all, government as well as others involved in our health care system, that advances in therapy are seldom made in leaps and bounds but rather by small painstaking steps—and that some of these steps have resulted from research in combination drugs as well as with single entities. Given the near-infinite biologic variation in patient response, this is hardly surprising to clinicians. It should not be to regulatory agencies either.

In the end, the practicing physician is in the best position to decide if a particular combination makes sense. Such a decision should not be made exclusively by those whose responsibility for continuing clinical care is limited. Clinicians are the best judges of efficacy because the ultimate proof of any product's effectiveness is acceptance by physicians who have observed its actions in patients over time. The corollary statement may be made about over-the-counter medicines, which would not long survive if they failed to afford the relief the user anticipates. That the antihistamine in a "cold" remedy may not *always* be necessary is no reason to proscribe the combination generally.

Opinion & Dialogue

What is your opinion, doctor?

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Adolescence

O Adolescence, O adolescence,
I wince before thine incandescence.
Thy constitution young and hearty
Is too much for this aged party.
Thou standest with loafer-flattened feet
Where bras and funny papers meet.
When anxious elders swarm about
Crying "Where are you going?" thou answerest "Out," . . .
. . . Ah, well, I must not carp and cavil.
I'll chew the spinach, spit out the gravel,
Remembering how my heart has leapt
At times when me thou didst accept.
Still, I'd like to be present, I must confess,
When thine own adolescents adolesce.

—Ogden Nash

"No longer children and not yet adults," adolescents are a group which has often been neglected medically. Although it is true that certain medical conditions occur frequently during the adolescent years, this is not the reason why the pediatrician, general practitioner and the internist should seek to learn more about and develop more interests in adolescence. The chief reason is that adolescents differ physiologically, developmentally and psychologically from children and adults. These differences should be understood and remembered. Physicians have been taught less about adolescence than about any other age group. Less research has been devoted to their disorders, and little special consideration has been given them in regard to health care, facilities or social and mental development.¹

For the above reasons, an Adolescent Unit, the first of its type in the state, was established in 1969 at the Children's Memorial Hospital, University of Oklahoma Health Sciences Center. This clinic provides comprehensive evaluation for adolescents by utilizing the talents of staff members from various departments of the Health Sciences Center.

In this issue, Doctor Harriet Coussons, Director of the Adolescent Unit at the Children's Memorial Hospital, discusses certain clinically important aspects of adolescent development as observed in the Adolescent Clinic. As she points out, adolescence is a process—a series of varied, rapid and extensive changes—as well as a period of life.

Adolescence is characterized by a series of biochemical, anatomical and mental changes that are not found in members of other age-groups. It encompasses the age range of about 10 to 20 years. At some time between ten and 14 years, individual girls and boys, each according to his own growth pattern, begin to develop evidence of adulthood. At some point between 16 and 20 years, each one's rate of maturation will have markedly decelerated. In the intervening years, an adolescent may experience various transient difficulties, which, while hardly to be considered abnormal, may nevertheless affect his health, behavior and efficiency. It is these rapid, extensive changes that differentiate adolescents from children and from adults and that must be taken into account when adolescents and their health problems are being given attention. Social factors, too, since many of the changes are closely related to them, need careful consideration.²

Adolescence, as a state in the physiological and psychological development of the individual, is a well-recognized entity in medical, legal and educational contexts. On the other hand, adolescence has achieved the status of a subculture in United States society only since about 1950. Its origins, however, date back at least as far as the 1920's, the period of "flaming youth," but probably no further back than World War I. *Webster's Dictionary*, first edition, 1901, does not include the term "teen-age." The revised second edition, 1947, contains the adjective "teen-age" but not the noun "teen-ager." Thus the teenage culture as a unique, definable phenomenon, although its roots go deep into United States soil, is a product of the special forces and influences of the mid-20th century.³

There are several misunderstood features about adolescence. Adolescence and puberty are not the same. By actual definition, adolescence is a time of physiologic growth, a period which comprises nearly half of the growing time in humans. Puberty designates an arbitrary point in adolescence in

the continuum of maturation, the menarche in girls, and a somewhat less clearly defined event occurring approximately two years later in boys. Adolescence has its beginnings about the age of ten years in girls and twelve years in boys. The end of adolescence is not clearly delineated and varies with the physical, emotional, mental, social or cultural criteria which define the adult. Pubescence, which is the time during which secondary changes such as pubic hair appear, is not clearly demarcated as to length, but it seems to run about two to three years. Prepubescent changes precede the first secondary sex changes of adolescence and are integral parts of maturation, not simply preparatory ones.

During early adolescence, the levels of various hormones increase rapidly from their childhood levels, growth is accelerated and secondary sexual characteristics develop. These changes mark the onset of puberty and usher in the post-pubertal period of maturation. The sequence in which they occur varies little from one adolescent to another, but the age at which they begin, the age at which the adolescent reaches an adult state, and the rate and extent of growth all vary considerably. This is true not only between the sexes and between persons of differing ethnic groups and cultures, but also between normal persons of the same sex and similar backgrounds and opportunities. Girls usually begin to mature, and also achieve maturity about two years earlier than boys, while, on the average, the physical growth of boys is greater than that of girls.

"At first the little boy was short and fat and the little girl was long and thin, then the little girl became round and chubby while the little boy grew lanky and wiry. This was because the little girl used to sit very quiet and be good and the little boy used not."

James Stephen's description of these two young adolescents emphasizes the fact that adolescence is not a static but an ever-changing process.⁴ The reasons he assigns for the difference between the boy and girl may not be the true ones, but we should remember that growth and development in adolescence must be considered separately for

boys and girls. Some parameters of growth differ in boys and girls from early infancy. Boys on the average are larger than girls from birth to the prepubescent period, and their deciduous teeth erupt somewhat earlier. They have slightly less subcutaneous fat during the middle years of childhood and a slightly higher basal metabolic rate when referred to body surface. Boys and girls have much the same degree of motor activity and coordination until the age of seven or eight years, but by nine years, while still preadolescent, boys move ahead of girls in some motor skills. By contrast, the acquisition of permanent dentition, another preadolescent growth feature, is earlier in girls than in boys.⁵

Physicians as a whole have not given adolescents the care that they have given to children and adults. Yet the future effectiveness of these young people depends in no small part on the care given them during the formative years of adolescence.

Although the numerical size of the adolescent group is in itself no more than a minor reason for increasing the attention given to the group, it is worthy of mention that, in the age-group 15 to 19 years alone, there are already some 300 million adolescents in the world, and it has been predicted that these numbers will increase rapidly during the next few years.²

One reason for the comparative neglect of adolescents is that they are generally regarded as being healthy. It is true that their morbidity and mortality rates are low and that adolescence can claim comparatively few medical disorders as exclusively its own. However, certain medical problems in the endocrine, nutritional, and dermatologic spheres are peculiar to this long interval of physiologic stress and psychologic change. However, improvement of the health of adolescents and of the social conditions that affect them adversely should be a matter of general concern. Moreover, many of the disorders peculiar to them, such as acne, gynecomastia, menstrual disturbances, slipped femoral epiphysis and certain emotional difficulties, are far from insignificant, and the rates of sickness, injury and death among adolescents are still considerable.

However, it is not only because of these considerations that adolescents should be

given an increased amount of attention and that physicians and all health personnel should be trained to understand them more fully. The compelling reason is that adolescents differ physiologically and psychologically from children and adults. The majority of the medical problems of the adolescent stems fundamentally from the developmental process. It is only when the physician considers the adolescent in this context will it be possible to take adequate account of such factors as the rapid growth of adolescents, their high degree of activity, the interrelationship of their growth and their endocrine systems, and their requirements for a healthy personality development. Recognition of the wide range of normal variation in developmental patterns and appreciation of the adolescent's reactions contribute much to the solution of these problems. It is essential also to bear in mind the great influence of the adolescent's childhood environment on his health and personality and the effect of any remedial measures on his future as an adult.²

The vast majority of adolescent units are under the direction of departments of pediatrics.⁶ This is no surprise since the problems of adolescence are in the main related to problems of development, the most important influence during a person's life-

time and one with which the pediatrician is intimately concerned. The care of adolescents has important advantages for the pediatrician. It extends the study of the natural history of many disorders by increasing the length of time they can be observed. A greater understanding and a truer picture of retarded growth, epiphyseal injury, eczema, epilepsy, learning disabilities, diabetes, valvular heart disease and a host of other conditions can be achieved if one has the opportunity of observing their course to adulthood. Attention to adolescence can result in personal gratification to physicians in other disciplines. *Harris D. Riley, Jr., MD* ☐

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Almost everyone who has taken pen in hand in the last month has tried to explain or to explain away the overwhelming landslide victory of Richard Nixon. I am prepared to offer my opinion, my only qualification being that I am one of 45 million Americans who concur on this issue.

I think we all agree that the American Dream has been betrayed. The American Dream, simply stated, is that those who are willing to work should have more of the good things of life than those who don't. Also, that we are each responsible for our own acts and should reap the good or evil thereof. And, that equality as guaranteed under the Constitution means only *equality of opportunity*, not equal distribution of the gross national product. And, that our great nation was built on the above concepts. Above all, that this great nation does not belong to us to give away to our enemies within or without. It was handed down to us and it represents the blood and guts of our forefathers and in turn the blood and guts of most of us.

The American people realized that the greatest opportunity to recapture the American Dream was to give Richard Nixon a mandate to return to the fundamentals of U. S. democracy and to sink forevermore the scandals of big government that have been foisted upon us by the likes of McGovern.

A BIG JOB IS AHEAD FOR NIXON:

a. To reverse the trend of the U. S. Supreme Court by appointing justices who understand the American Dream, and who can avoid the pitfalls of the Cadillac Liberals, who seem to believe that it is more important to be of some specific race or creed than it is to be an American.

b. To reinstitute the death penalty for crimes which deserve it. I cannot think of any

more deserving than Speck, who brutally murdered seven student nurses in Chicago and was reprieved by Supreme Court decree. These girls before being put to death were not advised of their constitutional privileges nor were they given a chance to appeal to a higher court, although Speck was accorded these chances.

c. To completely revise the justice system which has consistently relied on nit-picking for 30 years so that no justice is likely to emerge from the American judicial system.

d. To advise all minority groups that they are no longer minority groups. They are part of *us*, and they are either for us or against us. If these minority groups want something they will have to work for it like the rest of us do.

e. To reverse the gestapo tactics and intimidations of the Internal Revenue Service, whose basic premise refutes every value of the Constitution. Internal Revenue Service exists on the basis that every man is guilty until proven innocent.

f. To abolish big government spending through a re-evaluation of every federal program. To abolish the idea that the government knows better how to spend a working man's income than the man who earns it. Why should one man slave to rent an apartment and be taxed to help pay the rent of a drone next door?

g. To stop penalizing success by taxation at every turn of the road, ad valorem, income, auto, etc. The penalties for success are the opposite of the American Dream.

h. To focus attention on the lessons of Korea (30,000 Americans dead) and Vietnam (50,000 American dead). To notify the world, friends and foes alike, that the United States will never enter another war with a no-win policy. If we are going to make an omelette, we will have to break some eggs, whose eggs depends on who shares our interest in freedom for Americans and all the peoples of the world.

i. To notify all draft dodgers, who renounced American citizenship by leaving for Canada when our country was at war, that they can keep on going. Who needs them? We certainly do not.

j. To inform the 5% unemployed that if
(Continued on Page 494)

Clinically Important Aspects of Adolescent Development: A Brief Review

HARRIET W. COUSSONS, MD

The adolescent patient may come to his physician with questions reflecting deep concern with the processes of development. This review presents a few answers to those questions.

THE BITTERSWEET experience of growing up is perhaps a greater challenge today than at any time in history. Much has been written about the adolescent and his problems, old and new. Physiologic development is only part of the process of maturation but a very important one, particularly to the adolescent who compares himself to his peers and wonders: "Am I normal?"

The physician who cares for adolescent patients is in a unique position to practice the art of medicine. It is, perhaps, more important with this age group than with any other to take time to listen, examine, and counsel the individual. Here is an excellent opportunity to practice preventive medicine. In order to adequately answer the adolescent's question, "Am I normal?" it is important that the physician keep in mind clinically significant features of develop-

ment. The purpose of this paper is to provide a brief review of these aspects.

ONSET OF ADOLESCENCE

Many gaps exist in our knowledge of the initiation of hormonal events leading to the adolescent growth spurt. Much research has been done in this area but what sets off the hypothalamic "alarm clock" and stimulates the release of gonadotropins from the pituitary (or releases inhibition on them) remains unknown. Recently techniques to identify gonadotropins (luteinizing hormone and follicle stimulating hormone) have been improved and levels have been detected in prepubertal children which increase two to three times with adolescent development. The gonadotropins stimulate the development of the gonads and their hormones which are principally responsible for the adolescent growth spurt as well as the development of secondary sex characteristics. Growth hormone, insulin, adrenocorticosteroids, and thyroid are also important in the growth process but little is known of their functional inter-relationships.¹

THE SECULAR TREND

There is good evidence that the onset of puberty is occurring earlier with each generation, a phenomenon referred to by some authors as the "secular trend." Young people are maturing faster physically and are

From the Department of Pediatrics and the Adolescent Unit, Children's Memorial Hospital, University of Oklahoma Health Sciences Center, Oklahoma City, Oklahoma.

taller and heavier than their mothers and fathers. It is estimated that the average boy will be as much as one inch taller and ten pounds heavier than his father and the average girl may begin menses ten months earlier than her mother. Several authors have postulated that human heterozygosity resulting from the mixing of isolated populations with the coming of the industrial revolution is responsible for the trend toward earlier maturation.² Many factors influence growth and development including health, nutrition, and living conditions. With many environmental problems under control, genetic differences become more evident and are felt to be the main determinants of timing, rate, and appearance of developmental characteristics.

EVALUATING THE ADOLESCENT PATIENT

In assessing adolescent development the clinician has at least two aids. The bone age, based on the appearance of calcifying centers and degrees of fusion of the epiphyses, gives an indication of true physiologic age which reflects the patient's stage of development more accurately than the chronologic age.³ Standards have been established by which an individual's future height may be predicted using the bone age and height.⁴ Rating scales based on the appearance of the external genitalia have been devised for both girls and boys. Such aids are particularly useful in evaluation of the male, since there is no handy marker of full sexual maturity comparable to the menarche in the female.⁵

FEMALE DEVELOPMENT

Girls usually are two years ahead of boys in development. The adolescent growth spurt starts at seven to eight years in girls and is characterized by increased deposition of subcutaneous fat and more rapid enlargement of the skeleton. The pelvis widens and becomes gynecoid in shape in response to estrogenic stimulation. Development of the breasts begins at age eight-ten years with projection of the nipple which is soon followed by a button of gland tissue palpable under the areola. There is consider-

able variation in breast development but the adult form is attained by most girls by onset of menses.

Pubic hair generally appears at the time of breast development but may precede or follow it. Hair first appears on the mons veneris; the female escutcheon is generally present by menarche but hair growth may continue for several years.

Sexual maturity is heralded by the menarche which is now occurring between the ages of 12½ to 13 years in the USA. This event is primarily regulated by genetic factors and may normally occur as early as eight years or be delayed until 18 years. Several authors believe that the girl of 16 years with primary amenorrhea deserves clinical investigation because of the "secular trend."⁶

Following menarche, menses are generally anovulatory for the first year and may occur irregularly. However ovulation may occur anytime following menarche or even before menarche. Several cases of pregnancy occurring before the first menstrual period have been reported.⁶

Androgens are felt to be the primary stimulus for somatic growth in the pubertal girl while estrogens are responsible for the development of secondary sex characteristics and maturation of the skeleton. The peak growth period for girls occurs about one year preceding menarche (approximately age 12-13 years) during which a girl may grow from three to five inches in a year. Following menarche the rate of growth slows and a girl may or may not grow two to three inches before epiphyses fuse by age 17 years.

The appearances of other characteristics, such as axillary hair, vary a good deal. The appearance of axillary hair may precede or follow menarche by several months. Andro-

Harriet W. Coussons, MD was graduated from the Johns Hopkins University School of Medicine in 1965. Doctor Coussons has been certified by the American Board of Pediatrics and is an instructor at the Children's Memorial Hospital. Her medical affiliations include the American Academy of Pediatrics, Alpha Omega Alpha, Society for Adolescent Medicine and the Southern Society for Pediatric Research.

gens produce deepening of the voice during female pubertal development, but the change is less marked and more gradual than in boys. Androgens are also responsible for acne and apocrine secretions which occur during a girl's pubertal development.

Besides irregular menses, other variations may occur in the course of normal development which may cause a great deal of concern to the young girl. Occasionally breast development is asymmetrical. A padded bra and reassurance that breast development does continue throughout adolescence in response to estrogen and progesterone are helpful. In some individuals, hair appears on the breasts, abdomen, upper thighs or face. Generally such patterns of hair growth are familial, but if masculinization occurs, such as enlargement of the clitoris, endocrine studies are indicated.

MALE DEVELOPMENT

As with girls, there is a fairly wide range of normal in timing of onset of adolescent development in boys. The process of development is clinically manifested by testicular enlargement at age 10 to 13½ years. This is followed by the appearance of pubic hair about the base of the penis. During this time boys, as well as girls, have increased subcutaneous fat which in boys is generally lost with the growth spurt. Approximately a year following initial testicular growth, penile and skeletal growth accelerate. Height may increase three to six inches per year during the peak growth period at the average ages of 14 to 15 years. Following this peak, growth slows but continues until 17 to 18 years. Some individuals may continue to grow into their early twenties. Full development of muscle mass and strength occurs approximately two years following maximal skeletal growth.

With the maturation of the testes and development of the seminal vesicles, prostate, and bulbo-urethral glands, ejaculation and nocturnal emissions occur at the average age of 14 years. Production of viable sperm occurs at the average age of 15 to 16 years.⁵

Secondary sex characteristics continue to develop as the individual matures. Axillary hair appears approximately two years after initial pubic hair and is soon followed by

facial and body hair. The voice break usually occurs fairly late in development and is correlated with peak skeletal and penile growth. It is related to rapid growth of the cricoid and arytenoid cartilages under the influence of testosterone. This hormone also specifically influences cartilage which results in increased width of the shoulders.

It should be kept in mind that there is a wide range of normal, particularly in the timing of developmental onset. The growth spurt may begin between 10½ and 16 years and end between 13 and 17½ years. Thus, at certain points in time, particularly at ages 13, 14 and 15 years, boys of the same chronologic age may be at different stages of development with some ending and others only beginning the process of sexual maturation. Similar variations occur in girls. This is of concern to individuals of both sexes but may be more psychologically damaging to a young man.

Another aspect of normal development which may concern the male is physiologic gynecomastia which occurs during the peak growth period. Firm, slightly tender nodules may be palpable under one or both nipples in at least a third of normal adolescent males. This is a transient phenomenon probably related to estrogen output from the testis and disappears within 12 to 18 months. If the patient is obese or has fatty deposits with the gland enlargement, breast configuration may be psychologically damaging and surgical removal should be considered. Other causes of gynecomastia should be ruled out.

The following case history presents such a case in more detail: A 13-year-old white male came to the Adolescent Clinic at the Children's Memorial Hospital for a "check-up." He was slightly obese, had begun development approximately one year prior to his clinic visit, and was greatly concerned that he was developing breasts and "turning into a girl." He was a good student. He was relatively inactive and did not participate in sports but preferred reading and other sedentary tasks as well as cooking and housework. Past medical history and review of systems were unremarkable. On physical examination he appeared as a slightly obese, well-developed, adolescent male. No abnormalities of the head, eyes, ears, nose and

throat were noted. Cardiovascular and abdominal findings were within normal limits. Breast development consisted of 2.0 cm and 2.5 cm firm, slightly tender, well-circumscribed plaques under the nipple on the left and right respectively with a small amount of fat base. Examination of the genitalia revealed normal penis and testes approximately one-half adult size, with a moderate amount of pubic hair. A buccal smear was negative. It was felt that the patient had physiologic gynecomastia with anxiety accentuated by his rather feminine behavior patterns and lack of male identification. He was reassured of his physical normality and encouraged to restrict his eating and participate actively in more sports. It was also suggested that loose fitting shirts rather than tee shirts would make the "breasts" less obvious. A year following the initial visit the patient had grown five inches and appeared more muscular. "Breasts" had disappeared, obesity was no longer a problem, and the patient found himself enjoying basketball and other masculine pursuits.

Many adolescents are unaware of this transient breast enlargement but may have it called to their attention after some trauma. Pathological entities should be ruled out. Biopsy is not indicated in the usual case. Reassurance of normalcy is important to the patient, and in this case, knowledge of the patient's behavior was helpful in understanding and advising him.

The second case history illustrates how aspects of development may interact with long standing attitudes and produce psychological symptoms. A 14-year-old Caucasian girl came to Adolescent Clinic with complaints of painful menstrual periods. Menarche had occurred at 12 years, menses were regular, occurred every 28 days and lasted five days. Initially there was mild cramping for the first two or three days; by six months before being seen in clinic, the pain had become so severe that the patient missed two to three days of school monthly. The patient had very little difficulty during summer vacation. A general review of systems was unremarkable except for pollen allergies. Findings on general physical examination including a pelvic ex-

amination were within normal limits. The patient appeared relieved when told of her normalcy and asked several questions related to development and pregnancy. The mother, who accompanied the patient, volunteered that the "best thing" that had ever happened to her was a hysterectomy which had been preceded by many gynecologic complaints. This added to our suspicion of a psychological problem. It was felt that subconsciously the patient looked on menstruation and the feminine role as something painful and somewhat mysterious. The school was also feared as an area for development of male-female relationships with which she felt she could not cope. The patient received supportive therapy from a clinical psychologist and was seen in clinic from time to time. She returned to school, had progressively fewer problems with cramps, and became more accepting of her adult role. Great cultural and individual significance is placed on the menarche, but frequently girls are not well prepared for this milestone. Lack of a healthy model of female sexuality, coupled with insufficient basic information, contributed to this young lady's fears. She responded well to counseling and reassurance of her normalcy.

Discussing questions concerning development is one way in which the physician may establish rapport with the adolescent. Generally, young people are flexible and the prognosis for managing certain physical and emotional problems is better at this age than later. Adolescent patients need a physician who will listen and take an interest in them. □

The help of Janet Short, Judy Kelley, and Marlynn Likens is acknowledged.

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Indicates estrogen excess.

1st choice: Switch to a combination 50-mcg.-estrogen O.C. (such as **Demulen**[®]).

Age 19, small breasts, minor hirsutism, oily hair and skin. History of metrorrhagia, skipped or scanty menses. New user.

Indicates androgenic excess or estrogen deficiency (fertility is suspect)

1st choice: An estrogen-dominant O.C. (such as **Enovid-E**[®]).

Age 25, average frame, poor complexion. No problem with menses, normal para 1. On a low-estrogen/high-progestogen O.C. for two years. Now complains of scanty flow, decreased libido, depression.

Indicates probable buildup of progestogen-related side effects.

1st choice: Switch to a center-spectrum O.C. with more estrogen, less progestational activity (such as **Ovulen**[®]).

Age 21, short, mammosc, with normal menses, some acne. Was put on pre-nuptial regimen of 50-mcg.-estrogen/moderate-progestogen O.C. for two months. Now has increased acne.

Indicates metabolic production of androgen or relative estrogen deficiency.

1st choice: Switch to a 100-mcg.-estrogen combination (such as **Enovid-E**[®] or a sequential).



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Oral contraceptives are complex medications. Among the commonly reported adverse reactions are: intracycle bleeding, fluid retention, tender or swollen breasts, exacerbation of acne condition, changes in libido, amenorrhea while on medication and upon discontinuance, nausea, leg cramps, headaches, weight gain. Therefore, after reference to the prescribing information, oral contraceptives should be prescribed with care.

*Note: In some patients any level of exogenous estrogen or progestogen may produce symptoms of excess hormone activity.

Age 25, tall, slender, athletic, with flat chest. On a progestogen-dominant 50-mcg -estrogen O.C. Has recurrent trichomoniasis and Monilia.

Indicates estrogen deficiency and excess of progestogen in current O.C.

1st choice: Switch to a combination pill with 100 mcg. estrogen and less progestational activity (such as **Enovid-E*** or **Ovulen*** or a sequential).

Age 23, "Miss America" figure, previously normal menses, healthy skin and hair. On a 50-mcg -estrogen pill for four months. Complains of intracyclic bleeding.

Indicates probable need for more estrogen.

1st choice: Switch to a center-spectrum O.C. with more estrogen and moderate progestogen dominance (such as **Ovulen***).

Age 21, college senior, average build. On highly progestogen-dominant/low-dose-estrogen O.C. for six months. Now complains of amenorrhea, between-cycle headaches, weight gain.

Indicates probable progestogen excess.

1st choice: Switch to a center-spectrum pill (such as **Ovulen***).

Age 27, slightly overweight, multiparous. Nausea with all three pregnancies and with a sequential O.C. three years ago. Has premenstrual fluid retention and leg cramps.

Indicates probable excess of estrogen.

1st choice: A 50-mcg -estrogen/progestogen-dominant pill (such as **Demulen***).

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Actions—Ovulen and Demulen act to prevent ovulation by inhibiting the output of gonadotropins from the pituitary gland. Ovulen and Demulen depress the output of both the follicle-stimulating hormone (FSH) and the luteinizing hormone (LH).

Special note—Oral contraceptives have been marketed in the United States since 1960. Reported pregnancy rates vary from product to product. The effectiveness of the sequential products appears to be somewhat lower than that of the combination products. Both types provide almost completely effective contraception.

An increased risk of thromboembolic disease associated with the use of hormonal contraceptives has now been shown in studies conducted in both Great Britain and the United States. Other risks, such as those of elevated blood pressure, liver disease and reduced tolerance to carbohydrates, have not been quantitated with precision.

Long-term administration of both natural and synthetic estrogens in subprimate animal species in multiples of the human dose increases the frequency of some animal carcinomas. These data cannot be transposed directly to man. The possible carcinogenicity due to the estrogens can be neither affirmed nor refuted at this time. Close clinical surveillance of all women taking oral contraceptives must be continued.

Indication—Ovulen and Demulen are indicated for oral contraception.

Contraindications—Patients with thrombophlebitis, thromboembolic disorders, cerebral apoplexy or a past history of these conditions, markedly impaired liver function, known or suspected carcinoma of the breast, known or suspected estrogen-dependent neoplasia and undiagnosed abnormal genital bleeding.

Warnings—The physician should be alert to the earliest manifestations of thrombotic disorders (thrombophlebitis, cerebrovascular disorders, pulmonary embolism and retinal thrombosis). Should any of these occur or be suspected the drug should be discontinued immediately.

Retrospective studies of morbidity and mortality conducted in Great Britain and studies of morbidity in the United States have shown a statistically significant association between thrombophlebitis, pulmonary embolism, and cerebral thrombosis and embolism and the use of oral contraceptives. There have been three principal studies in Britain^{1,3} leading to this conclusion, and one² in this country. The estimate of the relative risk of thromboembolism in the study by Vessey and Doll³ was about sevenfold, while Sartwell and associates⁴ in the United States found a relative risk of 4.4, meaning that the users are several times as likely to undergo thromboembolic disease without evident cause as nonusers. The American study also indicated that the risk did not persist after discontinuation of administration and that it was not enhanced by long-continued administration. The American study was not designed to evaluate a difference between products. However, the study suggested that there might be an increased risk of thromboembolic disease in users of sequential products. This risk cannot be quantitated, and further studies to confirm this finding are desirable.

Discontinue medication pending examination if there is sudden partial or complete loss of vision, or if there is a sudden onset of proptosis, diplopia or migraine. If examination reveals papilledema or retinal vascular lesions medication should be withdrawn.

Since the safety of Ovulen and Demulen in pregnancy has not been demonstrated, it is recommended that for any patient who has missed two consecutive periods pregnancy should be ruled out before continuing the contraceptive regimen. If the patient has not adhered to the prescribed schedule the possibility of pregnancy should be considered at the time of the first missed period.

A small fraction of the hormonal agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect to the nursing infant cannot be determined at this time.

Precautions—The pretreatment and periodic physical examinations should include special reference to the breasts and pelvic organs, including a Papanicolaou smear since estrogens have been known to produce tumors, some of them malignant, in five species of subprimate animals. Endocrine and possibly liver function tests may be affected by treatment with Ovulen or Demulen. Therefore, if such tests are abnormal in a patient taking Ovulen or Demulen, it is recommended that they be repeated after the drug has been withdrawn for two months. Under the influence of progestogen-estrogen preparations pre-existing uterine fibromyomas may increase in size. Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation. In breakthrough bleeding and in all cases of irregular bleeding per vaginam, nonfunctional causes should be borne in mind. In undiagnosed bleeding per vaginam adequate diagnostic measures are indicated. Patients with a history of psychic depression should be carefully observed and

the drug discontinued if the depression recurs to a serious degree. Any possible influence of prolonged Ovulen or Demulen therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. A decrease in glucose tolerance has been observed in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving Ovulen or Demulen therapy. The age of the patient constitutes no absolute limiting factor, although treatment with Ovulen or Demulen may mask the onset of the climacteric. The pathologist should be advised of Ovulen or Demulen therapy when relevant specimens are submitted. Susceptible women may experience an increase in blood pressure following administration of contraceptive steroids.

Adverse reactions observed in patients receiving oral contraceptives—A statistically significant association has been demonstrated between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism and cerebral thrombosis.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, breast changes (tenderness, enlargement and secretion), change in weight (increase or decrease), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post partum, cholestatic jaundice, migraine, rash (allergic), rise in blood pressure in susceptible individuals and mental depression.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post treatment, premenstrual-like syndrome, changes in libido, changes in appetite, cystitis-like syndrome, headache, nervousness, dizziness, fatigue, backache, hirsutism, loss of scalp hair, erythema multiforme, erythema nodosum, hemorrhagic eruption and itching.

The following laboratory results may be altered by the use of oral contraceptives: hepatic function: increased sulfobromophthalein retention and other tests, coagulation tests: increase in prothrombin, Factors VII, VIII, IX and X, thyroid function: increase in PBI and butanol extractable protein bound iodine, and decrease in T³ uptake values, metyrapone test and pregnanediol determination.

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Iatrogenic Lithium Poisoning: A Case Report With Necropsy Findings

A. JAY CHAPMAN, MD
GILLIAN LEWIS, BSc*

Even a carefully-monitored patient on lithium carbonate may apparently exhibit sudden unexpected rise in serum lithium to toxic levels. Once toxicity is established, the changes are apparently not reversible by present means. Autopsy findings are nonspecific.

INTRODUCTION

LITHIUM WAS apparently first used as a drug in 1859 in the treatment of gout.¹ Although the bromide salt of lithium was later used as an anticonvulsant and sedative, the major application of lithium ion as a salt substitute (lithium chloride) for patients on low sodium diets came about in the 1940's. Many serious reactions and even deaths resulted from this often-uncontrolled and/or indiscriminate use.^{2, 3, 4, 5, 6} Since 1949, when it was employed by Cade⁷ in the treatment of mania it has been the subject of much

debate concerning its efficacy, specificity, indications and toxicity.

Several deaths have been reported from its use as a part of neuropsychopharmacological drug even under the conditions of apparently careful observation and control. The following case is one of the fortunately few fatalities as yet observed in England.

CASE REPORT

A 41-year-old white woman was admitted to hospital A on 22 April 1969, for treatment of an exacerbation of "longstanding" schizophrenia. Initial physical findings were normal and she was treated with Largactil and lithium carbonate (1200 mg daily). Frequent determinations of blood lithium levels were within "therapeutic range."

On 9 August 1969 she became mildly febrile and was "noted to be unwell." All medications were discontinued and on 11 August the patient was transferred to hospital B with the provisional diagnosis of meningitis. She was stuporous and exhibited generalized extrapyramidal rigidity, tremor, and severe twitching.

On 13 August, the laboratory at hospital C reported that the lithium level from serum obtained on 11 August was 4.6 mEq/l, the previous lithium level on 5 August having been 1.2 mEq/l. A diagnosis of lithium intoxication was made and intravenous infusions of sodium and potassium were be-

Department of Forensic Medicine, St. George's Hospital Medical School, London S.W.1. Present Address: Office of the Chief Medical Examiner, 824 N.E. 15th Street, Oklahoma City, Oklahoma 73104.

*The Area Laboratory at West Park Hospital, Epsom, Surrey, England.

Date	Li ⁺ (mEq/l)	Na ⁺ (mEq/l)	K ⁺ (mEq/l)	BUN (mg%)
11-8-69	4.6	149	3.8	
13-8-69	3.0	142	4.4	
13-8-69 (CSF)	1.4	136	4.2	
14-8-69				32
15-8-69	1.9			
16-8-69	1.7	146	4.4	12
17-8-69	0.8	152	5.0	16
18-8-69	0.5	150	5.0	
19-8-69	0.2	150	5.2	

TABLE I. Lithium, sodium, and potassium levels. The values given are from serum unless otherwise noted.

(CSF = Cerebrospinal Fluid)

gun. The serum lithium level fell progressively as shown in Table I. The serum sodium, potassium, and BUN levels are also presented in this table.

In spite of the decreasing lithium levels, the patient remained comatose and followed a progressively deteriorating course with grand mal seizures and status epilepticus controlled with Valium and paraldehyde. On 17 August, chest roentgenographs indicated bronchopneumonia, and ampicillin therapy was begun. Her course continued unaltered and she died on 22 August 1969.

Postmortem examination revealed a normally developed but moderately obese white female with general visceral passive hyperemia and pulmonary edema. There was no finding of significance in the central nervous system either grossly or microscopically, and no bronchopneumonia was present. The kidneys, although unremarkable grossly, were partly autolyzed and had interstitial edema. In addition, the epithelium of the convoluted tubules in many areas was necrotic, (Figs 1 & 2). The extent of this necrosis was difficult to assess completely because of the autolytic changes which had occurred postmortem. Postmortem tissue lithium levels are presented in Table II.

	Dry Wt	Wet Wt
Brain	6.5	2.1
Liver	9.4	3.4
Kidney	9.3	3.7
Muscle	2.2	0.6
Blood		0.3

TABLE II. Postmortem tissue lithium levels. The values are given for both wet and dried tissues (except blood) and are expressed in mEq/kg.

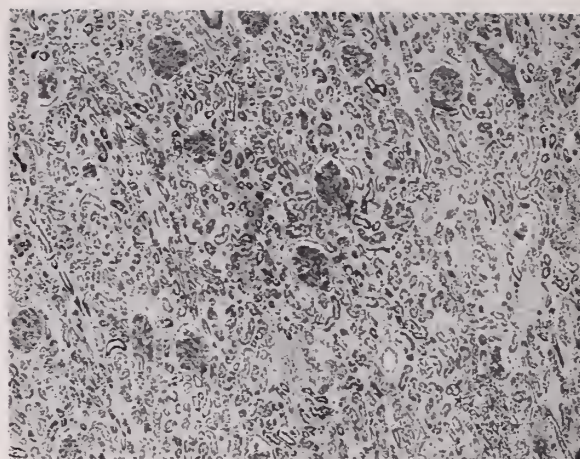


Figure 1. Lower power photomicrograph of kidney. The tubular pattern is intact and the interstitial edema is prominent.

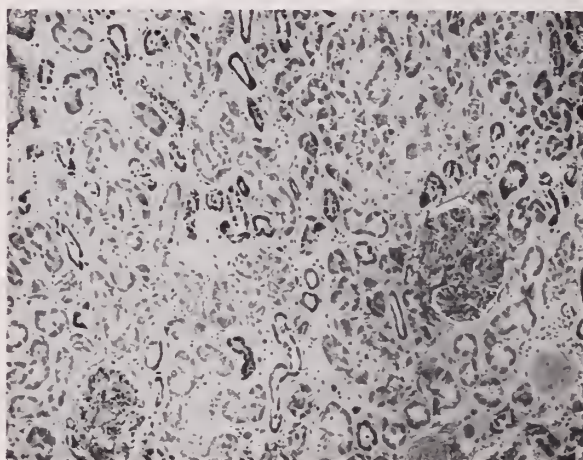


Figure 2. Higher power photomicrograph of kidney. The interstitial edema is striking and both the autolytic and necrotic changes can be seen in the convoluted tubules.

METHODS

The serum lithium was measured by flame emission spectroscopy utilizing a Hilger and Watts "Atomspek" atomic absorption spectrometer at 670.5 mu. The serum was diluted 1/10 and compared with standards of lithium carbonate ranging from 0.25 mEq/l to 2.0 mEq/l. The standards were similarly diluted 1/10 and contained sodium and potassium in concentrations equivalent to that in serum. Whole blood submitted for lithium content determination was treated with an equal volume of 10% trichloroacetic acid to precipitate the proteins. The treated blood was centrifuged and the supernate was diluted 1/5 and analyzed in the same manner

as the diluted serum. When necessary, low values were checked by incorporating an internal standard.

The postmortem tissues (kidney, liver, brain, muscle) were treated as described for brain tissue by Shaw, *et al.*⁹ The tissues were dried in platinum crucibles at 104° C overnight and then ashed at 620° C overnight. The residue was dissolved in five ml of aqua regia by heating gently in a fume cupboard for twenty minutes. The solution was diluted to 15 ml, neutralized with 0.1 N KOH and then analyzed as for serum.

It should be noted that all determinations upon this patient—both ante- and postmortem—were performed on the *same* equipment in the *same* laboratory by the *same* personnel. It has been the personal experience of the authors that there is considerable variation in determinations from laboratory to laboratory, presumably due to the fact that serum lithium levels are not commonly determined in most clinical laboratories and therefore the laboratory personnel are not adept in performance of the procedures.

DISCUSSION

With the increasing administration of lithium carbonate as a therapeutic agent in manic-depressive psychosis, and as prophylaxis against recurrent depression and manic-depressive attacks, it has become of great importance to investigate the possible toxicological consequences which may be occasioned by its use.

Since his graduation from Bowman Gray School of Medicine of Wake Forest University, A. Jay Chapman, MD, has been certified by the American Board of Pathology in Anatomic and Forensic Pathology. Doctor Chapman is Chief Medical Examiner for the State of Oklahoma as well as being a Clinical Professor of Forensic Pathology at the University of Oklahoma Health Sciences Center. His medical affiliations include the American Academy of Forensic Sciences, National Association of Medical Examiners, International Association for Accident and Traffic Medicine, Oklahoma State Association of Pathologists and the Sheriff and Peace Officers Association of Oklahoma.

collogical consequences which may be occasioned by its use. A comprehensive list of toxic manifestations has been presented by Gershon and Yuwiler⁸ and includes symptoms and signs involving practically all organ systems. The patient in the present case exhibited stupor progressing to coma, muscle hyperirritability, and finally, epileptiform seizures and death.

The serum lithium level in this case was monitored apparently regularly and dutifully over the period of approximately four months during which a constant daily dosage of 1200 mg lithium was administered. It is important to note that the rise in serum lithium occurred acutely without warning and was not apparently due to an acute overdose. Although remotely possible that the patient may have concealed a supply of lithium unknown to attendants, no evidence of this was found. The lithium value was 1.2 mEq/l on 5 August 1969, and by 8 August 1969, had increased to 4.6 mEq/l. The reason(s) for the sudden increase is (are) not known. It is known, however, that at serum levels of more than 1.5 mEq/l toxic symptoms occur in some cases. In fact, levels of 1.3-1.5 mEq/l have been reported to cause nausea in normal individuals.¹⁰ Levels greater than 1.5 mEq/l have been shown to cause symptoms of nausea and anorexia or of drowsiness leading to giddiness, tremor and ataxia. At the stage when the lithium concentration was 4.6 mEq/l she was in coma which did not reverse despite progressive lowering of the serum levels.

A case in which similar clinical findings occurred with a serum lithium level of 3.7 mEq/l has been presented in *The Lancet*¹¹ and despite heroic measures to reduce the lithium content of the serum, no change was produced in the patient's status and she died.

The patient in the present case had no chronic renal disease, and since the principal route of elimination of lithium is renal,¹² the consideration of kidney function is an important one. The observed kidney lesions (necrosis of tubular epithelium and interstitial edema) were acute and may have represented a direct, toxic effect of lithium ion. Although significance in relation to the lesions observed is not known, it is interesting to note that lithium levels of kidney and liver were higher than those of any other

Poisoning / CHAPMAN, LEWIS

organ analyzed postmortem and were considerable even though the drug had not been administered during the last fourteen days of life. In addition, there is considerable disparity between the levels in the tissues and in the blood (Table II).

CONCLUSIONS AND SUMMARY

A fatal case of iatrogenic lithium poisoning is presented together with the postmortem findings. The following conclusions appear warranted:

1. Lithium levels may rise suddenly for unexplained reasons and without warning in a carefully monitored patient and produce rapidly toxic manifestations, even though the patient has been on a fixed dosage for a fairly long period of time. The remote possibility of the patient taking additional lithium, unknown to attendants, was considered, but no evidence for such an occurrence was found.

2. It is suggested that, whatever the pathologic changes produced by lithium may be, they are irreversible by present therapy

and ultimately lead to the death of the patient.

3. Postmortem findings in this case suggest that lithium may have a toxic effect on the renal tubular epithelium.

4. It would appear from the present case and from the literature that lithium is a drug that is potentially dangerous and should be used with caution. □

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PRESIDENT'S PAGE

(Continued from Page 482)

they do not wish to participate in the greatest economic boom in world history, then they should not grumble about the good fortune of those who do. (Today's newspaper offered 399 ads for jobs and 10 people looking for work.) So who is unemployed, perhaps those who are too heavy for light work and too light for heavy work?

k. To revise the Welfare program to emphasize rehabilitation and discontinue subsidizing perpetual poverty.

l. To devise a military capability of weapons and trained men that is unequalled in the world. To announce to those of our enemies who would attack us that they will surely get a taste of our steel from which they will never recover.

m. When the above is accomplished, to build more super highways, improve the educational system, and encourage business expansion.

n. To leave alone the greatest health system in the world except to subsidize medical education and expand medical research.

Then, having accomplished the above, sit back and enjoy the building of a great civilization that should last 1,000 years or until the people are deluded into accepting another George McGovern and his reverse psychology. □

S.R. McCampbell, MD

Health Care in the Cherokee Seminaries, Asylums and Prisons: 1851-1906

STEPHEN T. AUTRY, BS
R. PALMER HOWARD, MD

Treatment and prevention of intermittent fever, pneumonia, consumption, typhoid and itch, as well as management of insanity, confronted and baffled physicians before the age of miracle drugs.

THE CHEROKEE PEOPLE, even prior to the removal from their homes in the southeast to the territory that is now Oklahoma, held a long partnership with political turbulence, disease, and death. Approximately four thousand Cherokees died in events related to the "Trail of Tears" during 1838 and 1839. The bloody fratricide preceding and during the Civil War added staccato emphasis to this painful experience.

During the interval between removal and Oklahoma statehood in 1907, the Cherokee leaders sought to bring peace, stability, and prosperity to their people. Various institutions—schools, an orphanage, prison and insane asylum—were established and administered by the National Council of the Cherokee Nation.

While much has been written concerning the politics and governmental development of the Cherokee Nation after removal to Indian Territory, there is a paucity of information pertaining to the standards of health in the nation during this period. A recent

paper elucidated the general organizational aspects of the medical profession and licensure by the Cherokee authorities in Indian Territory.¹ The present intent is to supplement the limited knowledge of the general public health of from twenty to twenty-five thousand citizens by examining the records of the medical care delivered in the Cherokee national institutions. Because these institutions enjoyed the support and participation of many segments of the Cherokee citizenry, an attempt toward an analysis of disease entities, their prevalence, and treatment modalities will be pursued.

The Male and Female Seminaries, the national high schools, were established by an Act of the Cherokee National Council on November 26, 1846. The Male Seminary, located near Tahlequah, and the Female Seminary, three miles southeast of Tahlequah at Park Hill, opened in May 1851.^{2,3}

Doctor and Mrs. Elizur Butler, missionaries of the American Board, served as resident stewards at the National Female Seminary for the first three years. Doctor Butler had practiced as a medical missionary in the Cherokee Nation East. After he served as physician with one of the removal parties in 1838-39, Chief John Ross designated him National Physician in the new territory. Butler resumed duties in a mission station prior to his appointment at the Cherokee seminary. The published letters to the missionary board gave details only about his pastoral functions at missions and the female seminary, although he continued to practice medicine.^{2,4,5} There were no formal arrangements for the provision of medical care at the seminaries before the Civil War, and no medical reports have come to light among the papers of the Cherokee Nation.

History of Medicine Division, University of Oklahoma Health Sciences Center.

Economic difficulties forced the suspension of the high schools in 1857 and during the chaotic Civil War years they remained closed. The Female Seminary was reopened in 1872, and the Male Seminary a few years later. As the size of the seminaries grew, so did the health requirements. From the sketchy records, it is deduced that there were no formal arrangements for health care in the seminaries prior to 1877. E. Poe Harris, MD, of Tahlequah, was often called upon to attend sick individuals at the institutions.

In 1876, Walter Thompson Adair, MD, wrote Dennis Wolf Bushyhead, the treasurer of the Cherokee Nation, about the proposed position of medical superintendent at the seminaries. Adair was a former Confederate surgeon and had been a fellow member with Bushyhead of the first class to graduate from the Male Seminary in 1854. He belonged to an old Cherokee family whose influence probably reached its zenith in the post-Civil War period. His brother, William Penn Adair, represented the Cherokee Nation at Washington with considerable ability and unbiased fairness to the political divisions among his fellow citizens.^{6, 7} Walter T. Adair was graduated from St. Louis Medical College in 1858 and played a conspicuous role in the medical administration of the Cherokee Nation in the 1870's to 1890's.^{1, 8, 9} Adair's letter to Bushyhead, dated March 1, 1876, follows:¹⁰

I understand that the 'Board of Education' convenes on the 15th Inst. to dispose of Business connected with the Two high Schools—Male & Female, at Tahlequah. I have also been informed that a Medical Officer, or 'Superintendent' for the two said Schools will also be provided at that time. I will be glad, if you will do me the honor of tendering that appointment to me, with a salary commensurate with the honor and responsibility of the place. In view of the fact that the duties of this Superintendency will embrace the 'clinical medicine' of both Institutions, I should think you could find yourselves able to allow a Salary of One Thousand Dollars per annum. I believe the salary of each one of the Superintendents of these two Schools is One Thousand Dollars—and I submit that the Medical Officer's who attends both Institutions, ought to be the same. Dr. [Felix H.] McNair informs me that unless it is *extremely* healthy this year his pay of Eight Hundred Dollars will not cover his actual Expenses [McNair was physician to the Cherokee Orphan Asylum, which commenced

operation during 1872].^{11, 12} We ought, it is believed, to extend our patronage to native talent where we *can* do so, and attain the necessary qualifications and ability. . . .

On November 22, 1876, the Cherokee National Council passed an act providing for a medical superintendent to the seminaries. The incumbent was required to reside at the Female Seminary, practice medicine solely within the confines of the two seminaries, and deliver an annual report to the National Council in November of each year. With the exception of 1880, 1882 and 1902, copies of the annual reports from 1877 to 1903 were located in *The Cherokee Advocate* or in other files at manuscript depositories.

During his first year as superintendent Adair faced many obstacles, such as proper sick rooms. He reported that in December 1876, "the sick, especially those of the 'Primary Departments' fared poorly; frequently from two to three sick patients being compelled to share the comforts of a single bed, taking their chances, in a room often with from ten to fifteen noisy room-mates." By January 1877, rooms at each seminary large enough for 12 to 15 patients had been set apart for the sick primary children.¹³

During the month of March, measles afflicted many and resulted in five of the seven deaths at the two seminaries in 1877. Intermitting and remitting fevers accounted for a large portion of the reported 806 illnesses during the year. Doctor Adair expressed the fear that any serious epidemic occurring in the Cherokee Nation would surely involve the seminary students. Therefore, he suggested "the propriety of erecting . . . a small hospital, (one at each place) for the accommodation of the sick of both Departments—(Primaries and Boarders)—A frame Building, removed some two or three hundred feet from the main building containing two separate wards would answer all practicable purposes . . . There might also be added suitable rooms for an office, and rooms for the medical Superintendent & family."¹³

In 1877-78, the incidence of measles decreased, a fact which Adair attributed to " . . . the use of disinfectants and other precautionary measures." During this year the total of 716 diagnoses included: pneumonia 50, pleurisy 23, scrofula 5, pulmonary consumption 1, and phthisis 1. Of the five

deaths, four were attributed to pneumonia.¹³ Since the deaths of these adolescents occurred from April to October, it is possible that the etiologic agent was the tubercle bacillus rather than the pneumococcus.

The medical superintendent's duties emphasized the importance of preventive medicine. In his 1878 report, Adair listed four imperatives to secure good health for the students. First, he wanted a national law prohibiting the attendance at the Seminaries of children who were ill or recently exposed to infectious diseases. Secondly, he again wanted a separate building at each of the seminaries to serve as a hospital. A sick nurse was requested to serve at the female seminary because "the young ladies require it—the physician cannot always question them as he would like; modesty prevents . . ." Lastly, Doctor Adair suggested that the boarders remain at the seminaries continuously for ten months as a means of reducing the incidence of intermittent fever. Since the Tahlequah district was relatively free of "malarial influences," the proposed schedule would benefit those pupils from other less healthful areas.¹³

The year 1878 was additionally important since Adair assumed responsibility for the health care of the Cherokee National Insane Asylum, taking over from Doctor E. Poe Harris, who had served the institution during its first year of operation. The Home for the Insane, Deaf, Dumb and Blind of the Cherokee Nation was opened March 1, 1877, primarily as a refuge for the disabled without close kinfolk. During 1878, the census varied from 20 to 23, and only one inmate died, from scrofula. Few palliative efforts toward treatment of the mentally ill were available. Cages were used to restrain the more violent inmates. Health care at this institution pertained primarily to physical health.¹⁰

In 1879, a total of 813 illnesses were treated at the seminaries. Adair noted the "prevailing Types of Disease during the present year have been the same at the two Seminaries. They have been mostly of that character known as *Malarious*—and requiring a liberal use of 'Sulfate of Quinine' and other 'anti-periodics.'"

There were three deaths during the year. Two Mayes brothers died from relapses of

"pneumonia," and on January 17, 1879, John R. Vann, the superintendent of the Cherokee Male Seminary died of "Congestion of the Brain, Complicated with Congestion of the Liver." Superintendent Vann's illness was a protracted one. Payment vouchers indicate he received nursing care for 20 weeks at \$5.00 per week.¹⁰ Shortly after this death, a controversy arose concerning Doctor Adair's handling of the case, and he replied to his critics in the national newspaper. The charges of neglect and of administering "poisonous medicines to Mr. Vann in a manner unauthorized by common sense and unsupported by competent authority" were based on the supposition that Doctor Adair had given large doses of Veratrium repeatedly after "the sedative effect on the 'arterial system' had been obtained."¹⁴ Veratrium alkaloids were frequently prescribed in the nineteenth century. Recently, the anti-hypertensive action has received much pharmacologic study, but the scant margin of safety between the therapeutic and toxic manifestations is now clearly recognized.¹⁵

Doctor Adair included in the 1879 report a recommendation that the seminaries introduce programs of graded exercises as a means of improving health. He suggested "such exercises as are calculated to expand

Stephen T. Autry received the BS degree from Oklahoma State University in 1969. He is now a fourth-year medical student at the University of Oklahoma College of Medicine. Work on this paper was done when Mr. Autry was a third-year medical student.

R. Palmer Howard, MD, is a graduate of McGill University, Faculty of Medicine. He is Professor of Medicine and History of Medicine at the University of Oklahoma Health Sciences Center, Adjunct Professor of History and the History of Science at the University of Oklahoma, and a Member of the Oklahoma Medical Research Foundation.

Doctor Howard is a Fellow of the American College of Physicians, a member of the Central Society for Clinical Research, the Endocrine Society, the American Association for History of Medicine, the American Historical Association, the Western History Association, and the Oklahoma Historical Society.

the lungs, and contract and relax the muscles of the extremities in a gentle manner.”¹⁰

During 1880-1881, the duties of the medical superintendent were further extended to include the National Prison, located in Tahlequah. The inmates suffered from various intestinal disorders, rheumatism, and “Intermitting and Remitting Fevers.”¹³

At the seminaries, the year 1881 was one of little disease. There had been a decline in the number of pupils in attendance, and no deaths occurred for over a year and a half. Adair mentioned the lack of drainage in the basements of both high schools, as well as at the prison. Thus, there occurred an “accumulation of dampness and the circulation of malaria.” In concurrence with the popular theories of his day, he believed that malaria was associated with foul odor; in his words, “the circulation of noxious effluvia.”¹³ The mosquito had not yet been implicated as the vector. Adair’s medical report for 1883, however, contains the interesting observation that most students stricken with malaria came from homes in the Grand, Verdigris, Illinois, and Arkansas River areas.¹⁶

In 1883-1884, there were no deaths at the seminaries, though two died in the asylum from chronic conditions, and two in the prison from pneumonia. In reporting on the Female Seminary, Adair remarked again on the need for a regulation to control the introduction of contagious diseases: “even the loathsome and dirty complaint, known as the Itch [scabies] has come near breaking up these schools, in the past; once introduced it is almost impossible to prevent its going through the school.”¹⁷

Adair also noted the value of more specific instructions to the Board of Trustees regarding the grounds for admission of applicants to the Insane Asylum: “Young persons with old Indolent ulcers have been admitted, and persons crippled with Rheumatism have also been taken in for treatment by the Board. Now it is evident to anyone that these are not ‘Decrepid’ persons, and besides the law only appropriated Two Hundred and Fifty Dollars per annum to buy medical supplies for the entire sick, and to pay the physician . . . instructions of a

more specific nature should be given to the Board of Trustees on the subject of admitting inmates; also, a larger amount of money should be appropriated.”¹⁷ Adair had complained previously that his annual salary of \$1,500 was insufficient. He was required to furnish all necessary medicines, other medical supplies, and pay the fees of assisting physicians.¹⁶

In November 1884, Adair attended at least seven girls stricken with typhoid. Susan Paris, a girl eleven years of age, died. A lawsuit was filed on December 10, 1884, against Adair, charging him with “Malpractice, Insobriety and Culpable Negligence and Inattention.” Affidavits in support of the plaintiffs were obtained from the seminary sick-nurse and Doctor James A. Thompson. Doctor Adair believed that the charges leveled against him were “the product of a conspiracy to effect my overthrow and acquire my official place.” Moreover, the charges of insobriety were refuted by several persons, including C. P. Mayes, the husband of the sick-nurse.¹⁸ Doctor Adair defended his treatment of Susan Paris by the medical theory and practice of the 1880’s. The 15% mortality rate from typhoid fever under Adair’s management at the female seminary appears consistent with that attained by contemporary physicians.

The typhoid epidemic which struck late in 1884 continued into 1885. The amount of disease prompted the National Council to call for an inquiry into the “sanitary and hygienic departments of these High Schools by a Special Board of Physicians with a view of ascertaining whether or not the peculiar sickness referred to above could be attributed to some local cause, then existing in or about the premises of these schools.” According to Adair’s 1885 report, the committee determined that the typhoid fever “was chiefly due to the poisoned condition of the atmosphere then circulating in the building, which poisoned air derived its origin from an admixture with gases arising from broken or badly arranged underground drainages.” The medical superintendent was therefore required to submit monthly statements on the sanitary conditions of the institute to the stewards, with appropriate recommendations.¹⁹ Two or three deaths also occurred from pneumonia during 1885. Pos-

sibly to reduce the danger of problems similar to the Paris incident, Adair noted the strict adherence to a system of medical consultations. Doctors J. A. Thompson, W. G. Blake, R. L. Fite, and R. O. Trent, served as consulting physicians.¹⁹

The year 1885-1886 brought less illness, although 37 cases of pneumonia occurred at the two high schools. The Male Seminary attained an enrollment of 153 students, which led Adair to express concern about the overcrowding of the sleeping quarters. In this report Adair listed the "anti-periodics," prescribed for the usual intermitting and remitting fevers, as "Sulfate of Quinine, supplimented with laxatives, and mercurial purgation."^{13, 20}

The description of the causes of typhoid fever reveal an incomplete understanding of the etiology in 1886, but the practical suggestions for the prevention of future epidemics are commendable.

Fevers of this Type are the result of *Blood-poisoning* from absorption from without—Septic matter or poisonous effluvia through the medium of the atmosphere we breathe and from actual contact with the epidermis and mucus membranes enter the blood and thus give rise to that peculiar kind of Fever we denominate *Typhoid Fever*. Hence the uneasiness experienced at its appearance. The conclusion was natural that there must be somewhere concealed about the premises, a *cess-pool*, or other patent cause, sufficient to account for this extra-ordinary sickness. The moisture, inevitably resulting from the presence of the Laundry and pumps, in the Basement was thought to be inadequate to account for the sudden appearance of this Serious Type of Fever—and consequently it was found on due examination that an underground water-pipe had given away in the vicinity of the Foundation on the west side of the Building under the *parlor*. This, with the Soap-Sud evaporation constantly going on from the Laundry in the Basement, and rising through the Registers, and other openings in the first floor was deemed sufficient to explain the presence of the peculiar sickness at this Seminary. These water-pipes and underground sewers have all been thoroughly examined into, and where ever found damaged have been put in repairs. . . . We would further ask an appropriation be made for building small Hospitals for the accommodation of the sick outside of the main Buildings. A small Hospital for each place—arranged with Rooms & Beds, sufficient to accommodate from a half dozen to a dozen sick patients would be sufficient. These could be erected some fifty to an hundred feet away from the main building. . . .²⁰

Although Carl J. Eberth in Germany described the bacillus of typhoid fever in 1880,

the practical advances in the understanding, diagnosis and prevention of the disease came only after the introduction of serological tests and preventive vaccinations by Fernand Widal and others in 1895-96. Few leaders in American medicine could have written about typhoid fever in a manner approaching the modern view before the first edition of William Osler's textbook in 1892.²¹

In the 1886 report Adair further urged the completion of deep wells at the male and female seminaries, not only for drinking purposes, but to provide water in the event of fire.²⁰ This foreboding became reality, for a disastrous fire struck the female seminary on April 10, 1887, leaving only the few majestic columns still remaining at the historic site.^{22, 23}

The year 1888 marked the end of W. T. Adair's service as Medical Superintendent for the Seminaries, Insane Asylum, and Prison. In the 1887-1888 report, he mentioned a patient at the insane asylum who died with "indolent ulcers of the leg, besides being of the tubercular diathesis."²⁴ This was the first use of the latter term in the annual medical reports.

In 1889, Doctor Adair transferred to the post of Medical Superintendent at the Cherokee National Orphan Asylum at Salina, where he served until 1894.²⁵

He was born February 6, 1865 and was graduated from the Missouri Medical College, St. Louis, in 1888. Adair was succeeded as medical superintendent of the seminaries, prison and insane asylum by Doctor Joseph M. Thompson of Cherokee lineage.

In the autumn of 1889, the female seminary was reopened on a new location at the northern edge of Tahlequah. This building is now designated Seminary Hall on the campus of Northeastern State College. In 1892, the Double Springs Seminary, the new Cherokee National Negro High School, commenced operations about five miles northwest of Tahlequah. There were 24 students initially, but more arrived as the year progressed.

In the annual medical reports for 1889-1892, Doctor Thompson devoted much attention to the necessary repairs to improve "the sanitary condition." The sewage run-off from the new Female Seminary into the stream above the townsite of Tahlequah was

a serious threat to the citizens. In 1892 this potential danger still required correction.^{26, 29}

At the seminaries, malaria and typhoid fever continued as problems. Doctor Thompson ascribed three deaths at the asylum in 1890 to typho-malarial fever, cerebral congestion, and "symptoms very much like hydro-phobia," and one prisoner was seriously ill with consumption.²⁷ The death of this prisoner, and an asylum inmate with aneurysm and dropsy, and another without definitive diagnosis were reported in 1891.²⁸ During 1892, two asylum inmates died of chronic mental conditions, but the superintendent was more concerned with the requirement of a "cross fence dividing the yard at the asylum, so that there will be a division of sex, this is necessary for the good of the institution."²⁹ Only one death from typhoid fever and one from pneumonia occurred at the seminaries during Doctor Thompson's tenure.

Richard L. Fite, MD, was born in Georgia October 17, 1856, and was graduated from the Southern Medical School at Atlanta in 1882. In 1883, he entered practice in Tahlequah and the following year became a Cherokee citizen through his marriage to Nannie K. Daniels. Following completion of a postgraduate course in New York during 1892, the National Council elected him to be medical superintendent of the seminaries and related institutions.¹³

According to Doctor Fite's reports, few major illnesses occurred at the seminaries. He attributed the frequency of chills, fever, and especially of diarrhea, to "the infected atmosphere emanating from the south side of the building."³⁰ Broken windows, deficient heating, sewage disposal, and the desirability of changing the location of privies from the proximity of the kitchens, received his attention.

During his last year, 1895-1896, Doctor Fite considered the general health at the Cherokee Seminaries to be satisfactory. Attendance decreased from 196 in 1894 to 143 students at the male seminary, and from 207 in 1894 to 200 at the female seminary.^{25, 31, 32} Colds and a few cases of pneumonia were reported, in addition to the usual

number of intermitting and remitting fevers. Although the census at the Asylum for the Insane, Blind and Indigent approximated only, three deaths occurred in 1895-96, one each from consumption, typhoid, and heart disease.³²

Fite mentioned tuberculosis with greater frequency than had his predecessors. Probably the incidence of this disease had not increased but the diagnosis was more customary in the Territory during the 1890's, because the German physician-bacteriologist, Robert Koch, described the tubercle bacillus only in 1882.

In 1897, Charles M. Ross, MD, assumed the medical responsibility for these institutions. Ross, the great grandson of Chief John Ross, was born in Tahlequah on December 17, 1868. He was graduated from the Cherokee Male Seminary in 1887 and received his medical degree from the Missouri Medical College, St. Louis, in 1891.

The period between 1897 and 1900 was one of reasonably good health at the seminaries, and no deaths occurred among the scholars or staff. During a measles epidemic in the female seminary in 1898 nearly 100 girls were out of school at the same time.

Sanitary conditions were of chief concern to Ross in the 1897 report.³³ The bathrooms at the female seminary had not been properly maintained, so an outhouse was being used. The proximity of the cesspool to the female seminary also raised the spectre of a typhoid epidemic. The cesspool annoyance was mentioned annually through 1901.³³ Lack of proper plumbing was also the chief problem mentioned with reference to the male seminary.

At the insane asylum, two inmates died of tuberculosis, three from complications of the underlying neurological conditions, and only nine were confined to this institution at the end of 1897. Apparently only domiciliary care was provided. In 1900 Ross labeled his employment at the asylum as a "perfunctory duty that offers no protection to the Nation and renders the affair a farce. . . . This Institution . . . should not be looked upon & conducted as a place of incarceration. . . ."³³ Doctor Ross reiterated his plea for a change in the management of the asylum in 1901.³³

Smallpox broke out in the seminaries early in the spring of 1901. Twenty-five cases eventually occurred, but rapid vaccination prevented further spread or deaths from this dread disease. Smallpox was more serious the next year. Samuel J. Starr recollected: "About the year of 1902 several boys took a drowsy fever about the same time at the Seminary. Dr. Charley Ross of Tahlequah was summoned. At once he pronounced it smallpox and ordered the place quarantined." The sick were isolated and a program of vaccination was begun. One boy died with smallpox, and several sustained bad scars. Quarantine was not rigorously followed, for even one of the teachers, E. C. (Shave) Alberty, escaped one night and walked all the way to Claremore.³ The extent of the smallpox epidemic in the Indian Territory during these years has been recorded in the Annual Reports of the Commissioner of Indian Affairs, and elsewhere.^{1, 8}

While the United States negotiated through the Dawes Commission with the Cherokee Nation, the seminaries were supervised jointly by the Cherokee Nation and the superintendent for schools in the Indian Territory. The Annual Reports of the Commissioner of Indian Affairs provide many details of the school administration until the United States assumed the sole responsibility July 7, 1906.³⁴ Health at the schools was not mentioned in the government publications for 1903-1906. The report of Doctor C. M. Ross for 1903, and that of the Board of Education for 1904, support the assumption that the health problems at these institutions remained essentially unchanged.³⁵

CONCLUDING REMARKS

In surveying the history of health care in the Cherokee institutions, several themes predominate. Among these are the status of the medical superintendent, the emphasis on sanitary controls, the paucity of specific measures of therapy, and the extended influence of the Cherokee contributions to Oklahoma. The latter point may be substantiated by the numerous graduates of the Cherokee seminaries who later qualified and practiced medicine with distinction both before and after statehood, including at least one woman, Isabel Cobb, MD.^{7, 8} Also, sev-

eral Cherokee citizens have played prominent roles in the profession since statehood.^{36, 37}

The form of practice in the Cherokee national institutions is noteworthy. The physician as medical superintendent was salaried. Out of his stipend he was obliged to pay for supplies necessary to treat his patients. The superintendent's salary was not sensitive to changes in enrollment at the seminaries; hence, an increasing patient load did not bring greater remuneration, but actually decreased his net earnings.

Furthermore, the extent to which the Cherokee Nation provided health services at its institutions was limited by the national income. Revenue came almost entirely from interest from bonds acquired through the sale of Cherokee lands to the United States. There was no provision for the National Council to impose taxes. Therefore, no substantial increase could occur in the total money available for appropriation towards various national programs, including the administration and health care at the various institutions. Repeated recommendations by the medical superintendent for the erection of separate hospitals at the two seminaries failed to attain budgetary approval. This decision, however, can scarcely be faulted in view of the large share of the national revenue already devoted by the Cherokees to education, and the low mortality rates among the seminary population. During the same decades, recommendations by Indian agents and physicians to the federal government for hospital construction at the reservations in western Indian Territory met with no more success.

One is struck by the enthusiasm with which the Cherokee people assimilated the educational and cultural norms of white Americans, and the concurrent medical standards of the period. Tribal medicine and various folk practices were relegated to minor roles, neither embraced by the mainstream of the Cherokee populace nor of any apparent influence on the medical practices at the institutions supported by the National Council.

Endemic diseases such as malaria and typhoid were a continual bane to Cherokee authorities. Smallpox, measles and scabies also preempted the endeavors of the medical superintendents. Compounding the Chero-

kee physicians' rudimentary understanding of the nature of communicable diseases was the paucity of medications with specific actions. Vaccine for smallpox and quinine for malaria were two specifics available to the Cherokee physician, although no doubt many concoctions and external applications provided beneficial symptomatic effects.

Physicians of the Cherokee institutions consistently based their health recommendations on general sanitary measures. Experience convinced them that inattention to the water supply, sewage disposal, heating, and crowded sleeping quarters, often preceded severe outbreaks of intestinal and respiratory illnesses. Tuberculosis was perhaps more prevalent than the medical reports indicate. The etiology and pathogenesis of the tubercle bacillus had not been completely elucidated, and many of the rather nebulous diagnoses of "pneumonia" and "congestion of the brain" may have been a consequence of tubercular infection. No measures were undertaken to check the spread of tuberculosis. Although the Cherokee physicians attempted to treat consumption, its infectious nature was not appreciated until Koch's discovery of the tubercle bacillus. Concomitantly, neither the causative organism nor "the mosquito vector for malaria" nor the typhoid bacillus were identified until the last years of the nineteenth century.

Health care at the asylum for the insane and other disabled persons dealt principally with the physical ailments of the inmates. Only nursing care and isolation were provided for mentally disturbed individuals.

With the advent of Oklahoma statehood, the Cherokee Nation as a distinct governmental entity ceased to exist. The experiences of the Cherokee people in education and medical organization, however, equipped them to play leading roles in the evolution of institutions in the State of Oklahoma. □

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800 N.E. 15th, Oklahoma City, Oklahoma 73104

State law in Oklahoma requires that practicing physicians, clinical laboratories, hospitals, penal and charitable institutions report specified diseases to the State Department of Health. The purpose of such reporting is to maintain surveillance of epidemic and often preventable diseases for the assessment of public health problems and the measuring of the effectiveness of prevention and control programs.

Since 1963 when the above Public Health Law was passed, compliance with the measure has been poor. The reasons for such compliance are numerous and range from physicians not knowing of the requirement, to flagrant disregard of the law after numerous official "notices." Complaints that the system is too time consuming, too complicated, and that the data are seldom seen again by the reporting physician, have been numerous.

Starting in January, 1973, the State Department of Health will be implementing a completely new reporting system for communicable and infectious diseases. This new system will embrace the concepts of brevity,



News From The Oklahoma State Department of Health

ease and timeliness to assure compliance and provide data of sufficient quality to develop scientifically sound prevention and control programs.

The individual case report card will be replaced by a single weekly case report form supplied only to physicians who see reportable communicable and infectious diseases—generalists, family practitioners, pediatricians and internists. Most diseases will require only case-count reporting. Diseases of true public health importance will be immediately reported by telephone. Other serious but relatively uncommon diseases will require slightly more information. Your local health department will be contacting you soon to explain the new system to your office staff.

We earnestly solicit your cooperation in this attempt to provide better preventive medical services to the citizens of Oklahoma. ☐

COMMUNICABLE DISEASES IN OKLAHOMA FOR OCTOBER, 1972

Disease	October 1972	October 1971	September 1972	Total to Date	
				1972	1971
Amebiasis	2	4	3	25	51
Brucellosis	1	—	1	7	4
Chickenpox	1	7	1	142	198
Encephalitis, infect.	4	8	1	15	37
Gonorrhea	732	1139	835	8475	6846
Hepatitis, infect. & serum	62	87	79	664	717
Leptospirosis	1	—	—	2	1
Malaria	—	2	1	5	67
Meningococcal infections	2	—	—	8	5
Meningitis, aseptic	12	9	15	49	115
Mumps	2	1	1	153	193
Rabies in animals	16	16	13	267	267
Rheumatic fever	1	2	1	25	22
Rocky Mt. spotted fever	3	1	3	34	28
Rubella	2	5	3	39	69
Rubella, congenital syn.	—	—	—	—	—
Rubeola	—	2	—	9	793
Salmonellosis	24	22	20	132	169
Shigellosis	63	13	20	176	76
Syphilis	99	104	76	979	1053
Tetanus	—	—	—	1	1
Tuberculosis, new active	22	24	43	311	282
Tularemia	1	1	2	11	17
Typhoid fever	—	1	2	4	3
Whooping cough	2	—	4	28	16

Types of Death Reports Cited

Oklahoma statutes now list eight categories of human deaths which must be reported to the chief medical examiner of the state. A. Jay Chapman, MD, cited the categories in a recent paper entitled "The Medical Examiner System — Changing and Vital."

The examiner pointed out that the name of the Board of Unexplained Deaths has been changed to the Board of Medicolegal Investigations and its membership has been expanded to seven persons named by office. These include the Dean of the University of Oklahoma Health Sciences Center, The Commissioner of Health, the Director of the Oklahoma State Bureau of Investigation, President of the Oklahoma Bar Association, President of the Oklahoma State Medical Association, and the President of the Oklahoma Osteopathic Association. Each of these individuals may name a designee to serve on the Board. The Chief Medical Examiner is an ex-officio member.

The eight categories of human death which must be reported include (1) Violent deaths; (2) Deaths under suspicious, unusual, or unnatural circumstances; (3) Deaths related to disease which might constitute a threat to the public health; (4) Deaths unattended by a licensed medical or osteopathic physician for a fatal or potentially fatal illness; (5) Deaths of persons after unexplained coma; (6) Deaths that are medically unexpected and occur in the course of a therapeutic procedure; (7) Deaths of any inmates occurring in any place of penal incarceration; and (8) Deaths of persons whose bodies are to be made ultimately unavailable for pathological study.

In his paper Doctor Chapman expanded on each of these categories as follows:

—Violent deaths include all deaths which are apparently homicidal, suicidal, or accidental, including but not limited to deaths due to thermal,

chemical, electrical, or radiational injury, and deaths due to criminal abortion, whether apparently self-induced or not.

—The examiner pointed out that it should be remembered that all deaths due to injury of any sort which contribute in any way to the person's death must be reported to the medical examiner. It is emphasized that a medical examiner's investigation and report is required irrespective of the period of survival following the injury and whether or not there was medical attendance at the time of the injury or during the period of survival.

—Suspicious, unusual or unnatural means is the category which overlaps the one above since violent deaths are unnatural. It also includes any death which is suspected to have resulted from accident, suicide, or homicide.

—Deaths related to disease which might constitute a threat to the public health are often those which occur when the person is apparently in good health. A rapidly fatal, undiagnosed meningococcal meningitis is a prime example of this type of death.

—Deaths unattended by a licensed medical or osteopathic physician are divided up into several subcategories. This includes those unattended during a fatal illness where the pa-

tient was found dead without obvious or probable cause, where the patient was unattended at anytime by a licensed medical or osteopathic physician, and where the patient was unattended during a terminal illness, particularly if such illness appears unrelated to a disease previously diagnosed and treated. An example would be a woman being treated for a simple dysmenorrhea and who is found dead in bed one morning. The examiner said, "The point to be stressed is that the deceased must have been treated for the disease process to which he has apparently succumbed."

This category also includes stillbirths or fetal deaths unattended by midwife.

—Reports of persons dying after an unexplained coma must be submitted to the medical examiner. These are particularly important where the coma may be due to drug overdose or traumatic head injury. The examiner said, "Obviously, many of the deaths occurring after unexplained syncope or coma will be suspicious deaths. If there exists no question that coma is due to natural disease and unrelated to trauma or poisoning, the medical examiner has no jurisdiction in the case."

—The sixth category is those deaths that are medically unexpected and that occur in the course of therapeutic procedure. This covers the deaths which some therapeutic procedures are undertaken, such as an operative procedure or injection of some drug, and the death occurs during the procedure but is not explained by the underlying medical facts of the case.

—Deaths of inmates occurring in any place of penal incarceration must be reported. Penal incarceration includes lockups, jails, prisons, and penitentiaries. It also includes those prisoners who are hospitalized in any hospital while in police custody. Penal incarceration does not include inmates of the State hospital whether they were committed there by the court or entered voluntarily.

—The last category, death of persons whose bodies are to be made ultimately unavailable for pathological study, includes those deaths of persons whose bodies will be cremated or buried at sea, regardless of the cause or manner of death. It is the intent of this category to prevent

ERRATUM

In News from The Oklahoma State Department of Health, page 464, in the November issue of *The Journal*, the last sentence in the second paragraph should have read: "This problem takes on even graver implications considering the frequency with which potentially serious errors are made in the disposition of bite cases (the decision whether or not to give vaccine, and the actual vaccination procedure)."

a case of concealed or secret homicide passing undetected.

Doctor Chapman said, "At the present time and for the foreseeable future, deaths of persons whose bodies are to be transported out of state are not being investigated unless they come under . . . jurisdiction for some other reason such as violent death."

Emphasizing that there exists no "24 hour rule" in Oklahoma, the medical examiner pointed out that investigation is required solely because the death falls into one of the outlined categories and not because the patient has died within the first 24 hours of hospitalization.

In summary Doctor Chapman said, "In order for any statewide medical examiner system to succeed and operate in an appropriate fashion the cooperation, indulgence, and help of many people are required. The medical examiner in the local community is the backbone of any such system. Although he is rewarded very little financially, those who actively participate in the system generally find the experience a rewarding one from the point of interesting cases which are seen and perhaps of more importance, from the standpoint of further contributing to the safety of their community as an integral and specialized part of the medicolegal investigative team." □

Public Confidence Still With Medicine

Medicine continues to lead other institutions in public confidence according to a Harris survey published in late November. However, medicine has shown a sharp decline in the past year.

The survey revealed that 48 percent of those surveyed said they had "a great deal of confidence" in the leadership of medicine. Last year the figure was 61 percent, and it was 72 percent in 1966.

Harris said that medicine had previously appeared "to be immune from the tide of disenchantment that has swept over most other leadership groups." Lowest regard for medicine was among suburban residents and blacks.

Harris commented, "There is virtually no desire in the country to have the federal government try to

solve the confidence gap in the private sector. Rather, people are looking for much better leadership to emerge within the major institutions in our society." He went on to say that the road back to public confidence for both private and public institutions is a long one and "appears to be uphill all the way."

Financial leaders placed second to medicine with 39 percent of the public showing "a great deal of confidence." Next came science with 37 percent. Military leaders were the biggest gainers in the past year, rising from 27 percent in 1971 to 35 percent in 1972.

Ranking lowest of the sixteen groups covered by the survey were the press — 18 percent; television—17 percent; labor—15 percent; and advertising—12 percent. Only 20 percent of the members of unions expressed a great deal of confidence in labor leaders. □

National Elections Leave Health Subcommittees Unchanged

Even with President Nixon's landslide victory, membership of the House and Senate Health Subcommittees was virtually unchanged by the election outcomes. There will be some new faces on the Senate Finance Committee and the House Ways and Means Committee when the 93rd Congress convenes in January.

Oklahoma's Fred Harris will be one of four senators not returning to the Senate Finance Committee. Clinton Anderson of New Mexico and Lynn Jordan of Idaho both retired. Jack Miller of Iowa was upset in a campaign that was marked, among other things, by charges that he represented special interests and spent too little time with the Senate Aging Committee of which he was a member.

Two top Republicans on the House of Representatives Ways and Means Committee did not seek reelection and there is some indication that Chairman Wilbur Mills of Arkansas will step aside as head of the powerful committee. He has indicated ambitions to replace Oklahoma's representative Carl Albert as Speaker of the House of Representatives. □

Tulsa County Medical Society Scholarship Fund Growing

The Scholarship Fund of the Tulsa County Medical Society has received two gifts of \$10,000 each to be used in establishing annual educational assistance grants for needy medical students.

Mrs. Frank L. Flack, widow of the Tulsa surgeon and medical leader who died in 1963, gave \$10,000 to create the Dr. Frank and Jessie Flack Memorial Scholarship, which will be awarded for the first time in July, 1973.

The second gift of \$10,000 was made by Dr. O. C. Armstrong, Tulsa general practitioner and civic worker who retired from active practice in 1959. His scholarship will also be awarded annually beginning next July.

The Scholarship Fund of the Tulsa County Medical Society was established in 1963 with a portion of surplus monies from the mass immunization for poliomyelitis conducted that year by the society. It has grown through gifts and bequests from an original principal of \$31,500 to approximately \$101,500. Scholarships in the amount of \$4,500 were awarded to nine medical and nursing students in 1972, and the amount will be considerably larger next year due to the Flack and Armstrong gifts.

The late Dr. Flack practiced at Tulsa as Medical Director and Chief Surgeon for Sinclair Oil Company from 1928, and after his retirement from the oil company was in private practice for several years preceding his death. He was a former President of the Tulsa County Medical Society, and in 1958 was selected as the Doctor of the Year by the Woman's Auxiliary to the Tulsa County Medical Society.

Dr. Armstrong entered practice in Tulsa in 1927 and was an active civic leader for many years. He also did general surgery, and was a member of the surgical staff of Hillcrest Medical Center.

Both Dr. Flack and Dr. Armstrong were active in developing medical services at Moton Memorial Hospital, and for many years worked with area physicians in improving health care in the low-income area. □



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214 331-8331

Swedish Medicine— A Closer Look

Sweden's largest daily newspaper, *Expressen*, painted a bleak picture of health care in Sweden in a series of articles printed earlier this year. While American politicians are raising a hue and cry in favor of national health insurance, health maintenance organizations, and numerous other schemes to improve "the delivery of health care," it is interesting to note that some of the countries being pointed to with pride aren't so proud of their own systems.

Expressen described a scene in a typical hospital in Sweden showing exhausted hospital personnel processing long lines of patients. Some of the people had waited years for elective medical care.

Sweden's people are not permitted to choose their own doctors or hospitals. They must go to the hospital serving the district where they live. Under Sweden's "seven crowns reform," which began about two years ago, a patient pays a flat rate of seven crowns . . . about \$1.50 . . . for a doctor's visit or hospitalization.

In its series of articles *Expressen* zeroed in on several people who have been entrapped in the bureaucratic web of Sweden's socialized medicine:

—Anna Britta Eriksson, 40, of Göteborg, had been waiting for 10 years to have a gallstone operation. Shortly after her gallstones were discovered, she moved from one city to another. Several years later when her gallstones again gave her difficulty, an operation was scheduled for one week later. However, this was postponed when the hospital discovered it had forgotten to obtain her X-rays taken in the first city. One year later the hospital phoned and said the operation had been rescheduled for the next morning. Unable to complete plans to enter the hospital on such short notice, Mrs. Eriksson asked that the operation be postponed and that she be given more notice the next time. At the time the story was printed, Mrs. Eriksson had not heard from the hospital again, and her chronic gallstone ailment was being treated with various medications and diet.

—Pia, 24, had suffered from a thyroid enlargement. When this condition flared up again, she found herself without medication. The hospital

in her home district told her there was a half year waiting time to be examined. After obtaining a requisition from the district physician, she waited four months for the first examination. Laboratory tests were scheduled for many months later. After nine months and a weight reduction from 107 to 96 pounds, Pia finally got her medication.

—A 52 year old laborer had been suffering from diminished visual acuity and watering eyes. He was told he could come in for an eye examination "in about a year." According to the chief physician in the ophthalmological clinic, the waiting time for new patients is 14 months. Waiting time for eye operations is one to two months, and this time cannot be shortened, even if desirable.

Physicians told *Expressen* that in Sweden the chance to survive often depends on where one lives. A survey of 29 hospitals throughout the country revealed lines of patients everywhere. Waiting times often ran into years. Less urgent cases often were not examined at all. However, in emergency cases care is given expeditiously.

(Taken from the October 20th issue of the California Medical Association News.) □

Warning Sounded About German Measles Vaccine

Physicians are being cautioned to anticipate possible severe reactions to the German Measles vaccine among older women. The warning came in an article appearing in the November 13th issue of the *Journal of the American Medical Association*.

The reactions reported took the form of a case of measles . . . Rubella . . . and required treatment to minimize joint pains and swelling. As with the natural course of the disease, symptoms resulting from vaccination increased with age.

The authors reported that rash, swollen glands, fever and swelling and pain in the joints were found far more often in women over 25. Fifty-eight percent of the 26 to 41 year old women tested had pain or swelling of the joints — generally the knees and hands and less frequently in the feet, neck, ankles and wrists. The symptoms usually began 11 to 21 days after vaccination and lasted from one to 10 days. Four of the subjects were temporarily limited

in their activities.

Children under 12 had no adverse reactions to the vaccine. Symptoms were infrequent in the 12 to 25 year age group and it would appear preferable to vaccinate before the 26th year.

Due to the substantial reaction in a small number of cases in the older age group, the authors urge that immunization take place as early in life as possible, with additional emphasis on vaccination of rubella susceptible girls in the 12 through 25 age group. □

"Bac Si My" Volunteers Needed

"Bac Si My" is Vietnamese for American physician. More than 750 American physicians have made more than 950 humanitarian "journeys" to Viet Nam under the Voluntary Physicians Program known as VPVN.

VPVN is financed by the state department's Agency for International Development (AID) and administered by the American Medical Association. Since the inception of the program in 1965, these American physicians have contributed 150 man-years of voluntary service to the unfortunate sick and injured population of South Viet Nam.

Approximately 100 additional volunteer American physicians will be required in fiscal year 1973. This is the number requested by AID for Viet Nam assignments. Physicians interested in volunteering should contact the VPVN Program Director, American Medical Association, 535 North Dearborn Street, Chicago, Illinois 60610.

Emphasis during the 1973 tours of duty will be placed on the teaching-preceptorship role of the volunteer physician. While there will be a continuous need for pure service roles, it is planned that VPVN will be utilized primarily to establish a continuing medical education program.

The AMA is attempting to recruit at least 24 Bac Si My in medicine—family practitioners, internists and pediatricians — a minimum of 24 general surgeons and 12 orthopedic surgeons. There is also a need for 36 other volunteers in specialties to include anesthesiology, ophthalmology, otolaryngology, psychiatry, radiology, and specialties in physical and preventive medicine. □

Report Urges Stricter Barbiturate Control

Nine types of barbiturates should be transferred from Schedule III of the Controlled Dangerous Substances Act to Schedule II according to a report from the Bureau of Narcotics and Dangerous Drugs. The recommendations were made on the basis of a 101 page report to the FDA entitled, "A Study of Current Abuse and Abuse Potential Of The Sedative-Hypnotic Derivatives on Barbituric Acid With Control Recommendations."

The nine barbiturates were identified by BNDD Director John Ingersoll as Amobarbital, Butobarbital, Cyclobarbital, Heptobarbital, Pentobarbital, Probarbital, Secobarbital, Talbital, and Vinbarbital.

If these nine were moved from Schedule III to Schedule II, the drugs would be subject to stricter controls including tighter security, reporting and record keeping requirements, production quotas, and restrictions on refilling prescriptions and on exportation or importation.

The Food and Drug Administration will make its own determination on whether or not the drugs should be placed under stricter controls and then make recommendations to the United States Attorney General. Any final decision by the Attorney General to transfer the drugs to Schedule II cannot be made without the concurrence of the HEW Secretary.

BNDD's action followed a year of study of scientific data and case histories indicating an increasing trend in barbiturate use and abuse. The report cites 1,771 barbiturate suicides and deaths and 3,475 overdose and injury cases in 32 states during a 17 month period ending May 1st, 1972.

In addition the report found a high incidence of barbiturate abuse by persons arrested in six cities. "In three of the six cities — Chicago, New Orleans, and Los Angeles — barbiturates were the principle drug of abuse, outranking even heroin," the report said.

Diversion from legitimate distribution channels and smuggling are the main sources of the barbiturates according to BNDD. □

Tulsa Physicians' Views Surveyed

Opinions of Tulsa physicians on ten different subjects were sought in an in depth survey conducted by the Tulsa County Medical Society. Nearly 63 percent of the society's membership responded.

Initiated by Robert M. Shepard, Jr., MD, Tulsa County Society President, the survey requested opinions on the OSMA Annual Meeting, a possible dues increase for Tulsa County, the Tulsa County Medical Society library, postgraduate education, a Tulsa medical school, physician's assistants, peer review, charging for insurance forms or transmitting records, disciplinary measures, and relationships with osteopaths.

The Tulsans were overwhelmingly in favor of a two-year medical school in the Tulsa area and 213 of them expressed their willingness to teach medical students as a volunteer faculty member.

On the subject of peer review, 261 stated that they supported the review of their fees by responsible fellow physicians and that they preferred fee adjudications to be handled through organized medicine peer review bodies as opposed to direct negotiations with the insurance companies. When asked if they were willing to abide by a fee decision made by such a committee, 248 said yes, 11 said no and 11 more had no opinion.

In response to the question, "Do you believe the peer review concept should be implemented in Tulsa to include quality of care as well as cost of care?," 212 responded "yes," while only 42 said "no." Two hundred twenty-three felt that the Department of Public Welfare should be equally bound by decisions of the peer review committee.

On other questions the Tulsans were a little more closely divided. The vote was 126 to 108 in favor of continuing to alternate the OSMA Annual meeting between Tulsa and Oklahoma City.

A modest dues increase of \$10 to \$20 to continue the society's present programs and services was favored by 162 of the respondents, with 113 voting no.

A majority of the Tulsa physicians wish to continue the Tulsa County Medical Society's library, while an overwhelming majority foresee it as

the possible nucleus of a Tulsa medical school library.

Postgraduate education was highly favored by the Tulsans. Two hundred eleven answered yes to the question "Do you favor the Tulsa County Medical Society supporting and furthering postgraduate medical education in Tulsa?" Two hundred twenty-one responded in the affirmative to the question "Do you believe postgraduate education, including internships and residencies, should be continued in Tulsa?"

One hundred ninety-nine responded that they favored the concept of physician's assistants in principal and 103 said that a P.A. would be useful in their own practice. In response to the question, "Do you feel the Tulsa County Medical Society should support and further the use of Physician's Assistants?," 161 responded "yes," while only 69 said "no."

Tulsa physicians apparently do not favor billing the patient for filling out simple routine insurance claim forms. One hundred eighty-seven responded no to a question on the subject, while only 73 felt it was all right. However, 246 said it was all right to bill a patient for filling out multiple or complicated insurance forms such as proof of death or forms with more than one page.

The vote was about two to one against billing a patient for transmitting his records . . . by copy or letter . . . to another physician. One hundred sixty said that a physician should not be entitled to bill the patient for the administrative admission . . . as contrasted with professional care incident to admission . . . of the patient to the hospital (the AMA Judicial Counsel says this is unethical).

Another ethics situation involved the question of whether or not a physician should be entitled to refuse to forward the patient's records to another physician until his bill for services had been paid. One hundred fifty-seven Tulsans said he should not refuse, while only 89 said that he could do so. It should be noted that the AMA Judicial Counsel has said that this is unethical.

(Editor's Note: In addition to being unethical, the failure of a physician to forward patient's records has placed many physicians in severe legal trouble.)

The survey ended with six ques-

tions on the subject of osteopathic relationships. The questions were as follows:

Do you believe that osteopaths should be considered cultists, and that it should be considered improper to associate professionally with them in any way? Thirty-two responded "yes," 222 said "no" and 21 had no opinion.

Do you believe that it should be ethical and proper in Tulsa to see osteopathic physician's patients in consultation, and render oral and written reports on these referrals to the osteopathic physician? Two hundred five answered "yes," 37 said "no," and 21 had no opinion.

Do you believe it should be ethical and proper in Tulsa to see patients in osteopathic hospitals, and render such care there (both medical and surgical) as may be immediately necessary? One hundred sixty-two responded "yes," 98 "no" and 21 had no opinion.

Do you believe osteopathic applicants to MD training programs (internships, residencies, fellowships, postgraduate meetings, etc.) should be accepted if otherwise, except by degree, qualified? One hundred seventy-nine answered "yes," 72 "no," and 30 had no opinion.

Do you believe osteopathic physicians who meet the requirements for hospital staff membership, except by degree, should be admitted to the staffs of Tulsa hospitals? One hundred forty said "yes," 109 said "no," and 35 gave no opinion.

Do you believe osteopathic and medical professions should consolidate and the distinctions between them (be) removed? One hundred sixty-eight responded in the affirmative, 83 said no, and 25 had no opinion. ☐

Nixon Reelection Aided By MDs

Two Oklahoma physicians played important roles in the Physician's Committee for the Reelection of the President. Rex E. Kenyon, MD, and J. B. Eskridge, III, MD, both of Oklahoma City were active in the organization.

The physician's committee was mobilized to support the President's campaign effort among the nation's physicians. It was headed up by a national steering committee under

the chairmanship of Malcolm C. Todd, MD, a Long Beach, California, surgeon who traveled with President Nixon as a staff physician in his 1952, 1956 and 1960 campaigns.

Doctor Kenyon served as one of the committee's ten members, each of whom had been responsible for forming physician's organizations in several states in their areas.

Oklahoma Chairman for the Physician's Committee for the Reelection of the President was J. B. Eskridge, III, MD, of Oklahoma City. ☐

GAO Issues Study of Hill Burton Program

Congress's watchdog on federal spending, the General Accounting Office, issued a voluminous report on the nation's health care system with recommendations that it estimated would save several billions of dollars annually.

Originally commissioned by Congress to study the Hill Burton Hospital Program, the year long study by GAO was expanded by the Senate Labor and Public Welfare Committee to include all aspects of health care.

The basic recommendations in the study were for better construction, design and planning, better usage of health care facilities, and more emphasis on preventative medicine and group practice.

Reduction of hospital stays and more emphasis on out-patient treatment are essential, the GAO said. It was recognized that the health insurance coverage of out of hospital care has been increased, but the GAO said that "a large number of people still lack this coverage because they cannot afford to spend more money on health insurance." The AMA and Blue Cross and Blue Shield were reported as favoring further increases in out-patient coverage.

According to GAO, one out of four patients was reported to receive more hospital care than necessary. The report said that reducing hospital stays an average of one day would in effect add 96,000 beds to the nation's hospitals.

The report also estimated that putting patients needing long term care, as opposed to acute, in special facilities would not only be less expensive but would make available 126,000

beds in general hospitals. Expansion of home health care programs would reduce the need for 20,000 hospital beds the report said. Sharing of services by regional groups of hospitals would increase efficiency. For example, the 90,000 hospital beds allotted to obstetrics could be reduced by 30,000.

The report also said sharing of services also could cut demand for new hospital facilities for such procedures as open heart surgery, radiation therapy and kidney dialysis. The GAO investigators found that of the 416 hospitals equipped to do open heart surgery in 1959, 97 percent used them less than four times a week. Pediatric and emergency services also offer sharing possibilities, the study said.

Concluding that alternate health care systems such as prepaid group practice, foundations for medical care and health maintenance organizations "May offer significant savings," the report stated that groups generally use at least 20 percent fewer hospital days per 1,000 patients than traditional care.

The planning of health care was criticized as being disorganized. "Less than 50 percent of the 160 health planning agencies responding to our inquiries about health facility needs provided data showing that they had knowledge of 1972 needs for various types of in-patient, extended and ambulatory care facilities and beds," the report said.

Major factors in rising hospital construction costs according to the GAO report was union wage increases beyond productivity increases and so-called feather bedding practices. The AFL-CIO Building Construction and Trades Department, in a letter to the GAO included in the report, said the GAO had been "grossly misleading and deductively backward," contending that productivity in the construction industry was far outstripping the wage gains.

The GAO said labor and industry must act if costs are to be held down. It said contractors who try to fight strikes "have been pressed by project owners to settle quickly to complete construction. Any increases in wages agreed to by contractors are generally passed on as increased costs to owners on future projects." ☐

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Oklahoman Named To College of Surgeons Board

G. Rainey Williams, MD, an Oklahoma City surgeon became one of thirty-three new members of the Board of Governors of the American College of Surgeons at the recent annual Clinical Congress of the college held in San Francisco.

He joins two other Oklahoma MDs, Ray H. Lindsey, Pauls Valley and John A. Schilling, Oklahoma City, on the college's 189 member Board of Governors.

The governors serve a three-year term, and may not serve more than three terms in succession. They act as communication links between the 33,000 fellows (members) of the college, 79 local chapters, specialty societies, the college headquarters staff, and the 19 member policy making body, the Regents.

Members of the Board of Governors represent each state in the United States, each province of Canada, and any country with more than 15 fellows. They also represent 52 related surgical associations and societies, and the federal medical services. ☐

Emergency Physicians Chapter Forming

A group of Oklahoma physicians interested in emergency medicine are in the process of petitioning the American College of Emergency Physicians for a charter to be issued for an Oklahoma chapter.

The nine Oklahomans signing the petition are already members of the American College of Emergency Physicians. Active membership in the ACEP is open to any licensed physician who indicates a significant interest in emergency medicine.

The college itself was chartered in August of 1968 and has as its primary goal the improvement of the delivery of emergency services throughout the country. It continues to promote and sponsor educational programs for the benefit of all personnel, medical as well as paramedical, who are part of the community emergency care team.

Oklahoma physicians interested in joining the college are invited to contact J. D. McKean, Jr., MD, in care of Midwest City Hospital, 2825 Park

DEATHS

JOHN H. ENNIS, MD
1922-1972

John H. Ennis, MD, Midwest City, died November 7th, 1972. Doctor Ennis was graduated from the University of Oklahoma School of Medicine in 1954. He was a member of the Southern Medical Association.

OTHEL J. GEE, MD
1893-1972

Long-time Oklahoma City physician, Othel J. Gee, MD, died November 26th, 1972. A native of Howe, Texas, Doctor Gee came to Oklahoma City in 1920. Doctor Gee was graduated from Vanderbilt University School of Medicine in 1915.

MARVIN D. HENLEY, MD
1897-1972

Retired physician, Marvin D. Henley, MD, Tulsa, died November 8th, 1972. Doctor Henley was graduated from the University of Oklahoma School of Medicine in 1922. He practiced for 43 years before retiring in 1968.

CLARENCE E. WILLIAMS, MD
1892-1972

Prominent Northwest Oklahoma physician, Clarence E. Williams, MD, Woodward, died November 9th, 1972 at the age of 80. He was active in state and local medical societies, and also a prominent civic leader, having served as Mayor of Woodward. ☐

Lawn, Midwest City, Oklahoma 73110.

Although the ACEP is less than five years old, it already has 30 chapters in 29 states and one Canadian province. Its membership is larger than 98 of the 125 national scientific medical societies recognized by the AMA.

In addition to Oklahoma, four other states and Puerto Rico have initiated petitions to establish chapters. ☐

Dentistry College Receives Funding

Oklahoma's new college of dentistry located in the Health Sciences Center has received a lion's share of federal funds allocated this year for the development of dental schools across the nation. These funds, when supplemented by the state Hero Bond money, will put the school in full operation in about three years.

Now officially in its first year of operation, the College of Dentistry has started the education of an initial class of 24 students. Next fall, a second class of 24 is projected according to Dean William E. Brown. It is hoped to increase enrollment in

1974 to a class of 35 or even 48. Eventually the dental school will enroll annual classes of 72 students.

Doctor Brown says that a total of \$11.1 million has been allocated to the College of Dentistry in three different grants under the Health Professional Education Assistance Program. He stated that that represents about 40 percent of all federal funds set out for dental school development assistance.

Construction has already started on a one-story addition to the Basic Science Building to house the Basic Science Education facilities of the College of Dentistry. In addition, construction will begin on two other dental buildings in the near future. A five-story, \$11 million dental clinical science building has received a federal grant of \$7.5 million and the same amount has also been granted for the construction of a ten-story biomedical science building. The funds to supplement the federal assistance for both buildings will come from Hero Bonds voted by Oklahomans in December of 1968. The bonds are being retired with the state cigarette tax funds. ☐

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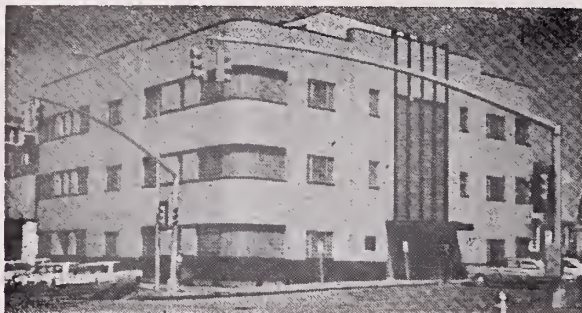
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of the Oklahoma State Medical Association

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April Issue

Editorial, Scientific, Book Reviews February 15, 1973
Advertising Copy March 15, 1973
News Copy, Miscellaneous Ads March 15, 1973

CONTRIBUTIONS

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Footnotes, bibliographies, and legends for illustrations should be submitted on separate sheets, double-spaced. Bibliographies should follow in order of: name of author, title or article, name of periodical with volume number, page and date of publication. These references should be alphabetized and numbered in sequence.

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NEWS

Members of the Oklahoma State Medical Association, the constituent societies of the association, and all readers in general are invited to supply news items of general interest to the profession.

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All advertising copy must be approved by the Editorial Board before acceptance for publication. General and miscellaneous advertising rates will be sent on request.

EDITING SERVICE

The Editorial Board reserves the prerogative to submit contributions to a Medical Editing Service when warranted. If such is felt necessary, the Editor will contact the author for approval, informing him that there will be modest charge for this service.

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Authors will receive reprint order forms from the Transcript Press, P.O. Drawer 1058, Norman, Oklahoma 73069, prior to final publication of their articles. Other requests for reprints must be made to the Transcript Press within 30 days after publication.

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Rondomycin® (methacycline HCl)

CONTRAINDICATIONS: Hypersensitivity to any of the tetracyclines.

WARNINGS: Tetracycline usage during tooth development (last half of pregnancy to eight years) may cause permanent tooth discoloration (yellow-gray-brown), which is more common during long-term use but has occurred after repeated short-term courses. Enamel hypoplasia has also been reported. **Tetracyclines should not be used in this age group unless other drugs are not likely to be effective or are contraindicated.** **Usage in pregnancy.** (See above **WARNINGS** about use during tooth development.)

Animal studies indicate that tetracyclines cross the placenta and can be toxic to the developing fetus (often related to retardation of skeletal development). Embryotoxicity has also been noted in animals treated early in pregnancy.

Usage in newborns, infants, and children. (See above **WARNINGS** about use during tooth development.)

All tetracyclines form a stable calcium complex in any bone-forming tissue. A decrease in fibula growth rate observed in prematures given oral tetracycline 25 mg/kg every 6 hours was reversible when drug was discontinued.

Tetracyclines are present in milk of lactating women taking tetracyclines.

To avoid excess systemic accumulation and liver toxicity in patients with impaired renal function, reduce usual total dosage and, if therapy is prolonged, consider serum level determinations of drug. The antianabolic action of tetracyclines may increase BUN. While not a problem in normal renal function, in patients with significantly impaired function, higher tetracycline serum levels may lead to azotemia, hyperphosphatemia, and acidosis.

Photosensitivity manifested by exaggerated sunburn reaction has occurred with tetracyclines. Patients apt to be exposed to direct sunlight or ultraviolet light should be so advised, and treatment should be discontinued at first evidence of skin erythema.

PRECAUTIONS: If superinfection occurs due to overgrowth of nonsusceptible organisms, including fungi, discontinue antibiotic and start appropriate therapy.

In venereal diseases, when coexistent syphilis is suspected, perform darkfield examination before therapy, and serologically test for syphilis monthly for at least four months.

Tetracyclines have been shown to depress plasma prothrombin activity; patients on anticoagulant therapy may require downward adjustment of their anticoagulant dosage. In long-term therapy, perform periodic organ system evaluations (including blood, renal, hepatic).

Treat all Group A beta-hemolytic streptococcal infections for at least 10 days.

Since bacteriostatic drugs may interfere with the bactericidal action of penicillin, avoid giving tetracycline with penicillin.

ADVERSE REACTIONS: Gastrointestinal (oral and parenteral forms): anorexia, nausea, vomiting, diarrhea, glossitis, dysphagia, enterocolitis inflammatory lesions (with monilial overgrowth) in the anogenital region.

Skin: maculopapular and erythematous rashes; exfoliative dermatitis (uncommon). Photosensitivity is discussed above (See **WARNINGS**).

Renal toxicity: rise in BUN, apparently dose related (See **WARNINGS**).

Hypersensitivity: urticaria, angioneurotic edema, anaphylaxis, anaphylactoid purpura, pericarditis, exacerbation of systemic lupus erythematosus.

Bulging fontanels, reported in young infants after full therapeutic dosage, have disappeared rapidly when drug was discontinued.

Blood: hemolytic anemia, thrombocytopenia, neutropenia, eosinophilia.

Over prolonged periods, tetracyclines have been reported to produce brown-black microscopic discoloration of thyroid glands; no abnormalities of thyroid function studies are known to occur.

USUAL DOSAGE: Adults—600 mg daily, divided into two or four equally spaced doses. More severe infections: an initial dose of 300 mg followed by 150 mg every six hours or 300 mg every 12 hours. Gonorrhea: In uncomplicated gonorrhea, when penicillin is contraindicated, 'Rondomycin' (methacycline HCl) may be used for treating both males and females in the following clinical dosage schedule: 900 mg initially, followed by 300 mg q i d for a total of 5.4 grams.

For treatment of syphilis, when penicillin is contraindicated, a total of 18 to 24 grams of 'Rondomycin' (methacycline HCl) in equally divided doses over a period of 10-15 days should be given. Close follow-up, including laboratory tests, is recommended.

Eaton Agent pneumonia: 900 mg daily for six days.

Children—3 to 6 mg/lb/day divided into two to four equally spaced doses.

Therapy should be continued for at least 24-48 hours after symptoms and fever have subsided.

Concomitant therapy: Antacids containing aluminum, calcium or magnesium impair absorption and are contraindicated. Food and some dairy products also interfere. Give drug one hour before or two hours after meals. Pediatric oral dosage forms should not be given with milk formulas and should be given at least one hour prior to feeding.

In patients with renal impairment (see **WARNINGS**), total dosage should be decreased by reducing recommended individual doses or by extending time intervals between doses.

In streptococcal infections, a therapeutic dose should be given for at least 10 days.

SUPPLIED: Rondomycin® (methacycline HCl): 150 mg and 300 mg capsules, syrup containing 75 mg/5 cc methacycline HCl.

Before prescribing, consult package circular or latest PDR information.

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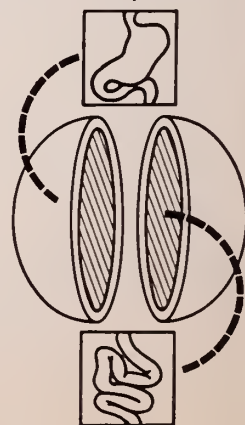
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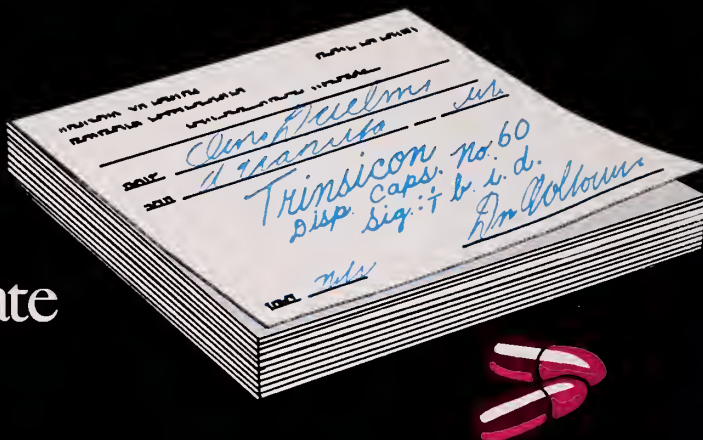
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(See reverse side for prescribing information.)

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Description: Each Pulvule® contains—

Special Liver-Stomach Concentrate, Lilly
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Cobalamin Concentrate, N.F., equivalent to Cobalamin 7.5 mcg.
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Iron, Elemental (as Ferrous Fumarate) 110 mg.
Ascorbic Acid (Vitamin C) 75 mg.
Folic Acid 0.5 mg.

Indications: Trinsicon is a multifactor preparation effective in the treatment of anemias that respond to oral hematinics, including pernicious anemia and other megaloblastic anemias and also iron-deficiency anemia. Therapeutic quantities of hematopoietic factors that are known to be important are present in the recommended daily dose.

Vitamin B₁₂ with Intrinsic Factor—When secretion of intrinsic factor in gastric juice is inadequate or absent (e.g., in Addisonian pernicious anemia or after gastrectomy), vitamin B₁₂ in physiological doses is absorbed poorly, if at all. The resulting deficiency of vitamin B₁₂ leads to the clinical manifestations of pernicious anemia. Similar megaloblastic anemias may develop in fish tapeworm (*Diphyllobothrium latum*) infection or after a surgically created small-bowel blind loop; in these situations, treatment requires freeing the host of the parasites or bacteria which appear to compete for the available vitamin B₁₂. Strict vegetarianism and malabsorption syndromes may also lead to vitamin B₁₂ deficiency. In the latter case, parenteral therapy, or oral therapy with so-called massive doses of vitamin B₁₂, may be necessary for adequate treatment of the patient.

Potency of intrinsic factor concentrates is determined physiologically, i.e., by their use in patients with pernicious anemia. The liver-stomach concentrate with intrinsic factor and the vitamin B₁₂ contained in two Pulvules Trinsicon provide 1½ times the minimum amount of therapeutic agent which, when given daily in an uncomplicated case of pernicious anemia, will produce a satisfactory reticulocyte response and relief of anemia and symptoms.

Concentrates of intrinsic factor derived from hog gastric, pyloric, and duodenal mucosa have been used successfully in patients who lack intrinsic factor. For example, Fouts *et al.* maintained patients with pernicious anemia in clinical remission with oral therapy (liver extracts or intrinsic factor concentrate with vitamin B₁₂) for as long as twenty-nine years.

After total gastrectomy, Ficarra found multifactor preparations taken orally to be "just as effective in maintaining blood levels as any medication that has to be administered parenterally." His study was based on twenty-four patients who had survived for five years after total gastrectomy for cancer and who had been taking two Pulvules Trinsicon daily.

Folic Acid—Folic acid deficiency is the immediate cause of most, if not all, cases of nutritional megaloblastic anemia and of the megaloblastic anemias of pregnancy and infancy; usually, it is also at least partially responsible for the megaloblastic anemias of malabsorption syndromes, e.g., tropical and nontropical sprue.

It is apparent that in vitamin B₁₂ deficiency (e.g., pernicious anemia), lack of this vitamin results in impaired utilization of folic acid. There are other evidences of the close folic acid-vitamin B₁₂ interrelationship: (1) B₁₂ influences the storage, absorption, and utilization of folic acid, and (2), as a deficiency of B₁₂ progresses, the requirement for folic acid increases. However, folic acid does not change the requirement for vitamin B₁₂.

Iron—A very common anemia is that due to iron deficiency. In most cases, the response to iron salts is prompt, safe, and predictable. Within limits, the response is quicker and more certain to large doses of iron than to small doses.

Each Pulvule Trinsicon furnishes 110 mg. of elemental iron (as ferrous fumarate) to provide a maximum response.

Ascorbic Acid—Vitamin C plays a role in anemia therapy. It augments the conversion of folic acid to its active form, folinic acid. In addition, ascorbic acid promotes the reduction of ferric iron in food to the more readily absorbed ferrous form. Severe and prolonged vitamin C deficiency is associated with an anemia which is usually hypochromic but occasionally megaloblastic in type.

Contraindications and Precautions: Anemia is a manifestation that requires appropriate investigation to determine its cause or causes.

Folic acid *alone* is unwarranted in the treatment of pure vitamin-B₁₂ deficiency states, such as pernicious anemia. Indeed, the use of folic acid in large doses in pernicious anemia without adequate vitamin B₁₂ may result in hematologic remission but neurological progression.

As with all preparations containing intrinsic factor, resistance may develop in some cases of pernicious anemia to the potentiation of absorption of physiological doses of vitamin B₁₂. If resistance occurs, parenteral therapy, or oral therapy with so-called massive doses of vitamin B₁₂, may be necessary for adequate treatment of the patient. No single regimen fits all cases, and the status of the patient observed in follow-up is the final criterion for adequacy of therapy. Periodic clinical and laboratory studies are considered essential and are recommended.

In extremely rare instances, skin rash suggesting allergy has been noted following the oral administration of liver-stomach material. Allergic sensitization has been reported following both oral and parenteral administration of folic acid.

Hemochromatosis and hemosiderosis are contraindications to iron therapy.

Adverse Reactions: In rare instances, iron in therapeutic doses produces gastrointestinal reactions, such as diarrhea or constipation. Reducing the dose and administering it with meals will minimize these effects in the iron-sensitive patient.

Dosage: One Pulvule twice a day. (Two Pulvules daily produce a standard response in the average uncomplicated case of pernicious anemia.)

How Supplied: Pulvules Trinsicon® (hematinic concentrate with intrinsic factor, Lilly), in bottles of 60 and 500 and in Identi-Dose® (unit dose medication, Lilly) in boxes of 100.

[DCC-71]

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the geriatric depressive.

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One way of relieving depression in the geriatric patient is with Tofranil.

Please read the prescribing information for details of usage (lower dosages are recommended for elderly patients and adolescents), precautions, warnings, contraindications, adverse experiences, and dosage recommendations. It is summarized below.

Tofranil® Geigy imipramine hydrochloride USP

Tofranil® imipramine hydrochloride USP

Contraindications: The concomitant use of this agent and monoamine oxidase inhibiting (M.A.O.I.) compounds is contraindicated. Hyperpyretic crises or severe convulsive seizures may occur. Potentiation of these effects can be serious or even fatal. An interval of at least 14 days after M.A.O.I. therapy has been discontinued should be allowed before this drug may be substituted. Initial dosage should be low, increases should be gradual, and the patient's progress should be carefully observed. The drug is also contraindicated (a) during the acute recovery period after myocardial infarction, (b) in patients with known hypersensitivity to the drug. Cross-sensitivity to other dibenzepine compounds should be kept in mind.

Warnings: *Usage in Pregnancy:* Safe use of imipramine during pregnancy and lactation has not been established; therefore, in administering the drug to pregnant patients, nursing mothers, or women of childbearing potential, the potential benefits must be weighed against the possible hazards. Animal reproduction studies have yielded inconclusive results. There have been clinical reports of congenital malformation associated with the use of this drug, but a causal relationship has not been confirmed.

Extreme caution should be used when this drug is given to:
-patients with cardiovascular disease because of the possibility of conduction defects, arrhythmias, myocardial infarction, strokes and tachycardia;
-patients with increased intraocular pressure, history of urinary retention, or history of narrow-angle glaucoma because of the drug's anticholinergic properties;
-hyperthyroid patients or those on thyroid medication because of the possibility of cardiovascular toxicity;
-patients with a history of seizure disorder because this drug has been shown to lower the seizure threshold;
-patients receiving guanethidine or similar agents since imipramine may block the pharmacologic effects of these drugs.

Usage in Children: Pending evaluation of results from clinical trials in children, the drug is not recommended for use in patients under twelve years of age.

Since the drug may impair the mental and/or

physical abilities required for the performance of potentially hazardous tasks, such as operating an automobile or machinery, the patient should be cautioned accordingly.

Precautions: Because of the possibility of suicide in seriously depressed patients, careful supervision during the early phase of treatment is necessary and hospitalization may be required. Prescriptions should be written for the smallest amount feasible.

Hypomanic or manic episodes may occur, particularly in patients with cyclic disorders. Such reactions may necessitate discontinuation of the drug. If needed, imipramine may be resumed in lower dosage when these episodes are relieved. Administration of a tranquilizer may be useful in controlling such episodes.

Prior to elective surgery, imipramine should be discontinued for as long as the clinical situation will allow.

An activation of the psychosis may occasionally be observed in schizophrenic patients and may require reduction of dosage and the addition of a phenothiazine.

In occasional susceptible patients or in those receiving anticholinergic drugs (including anti-parkinsonism agents) in addition, the atropine-like effects may become more pronounced (e.g., paralytic ileus). Close supervision and careful adjustment of dosage is required when this drug is administered concomitantly with anticholinergic or sympathomimetic drugs.

Patients should be warned that the concomitant use of alcoholic beverages may be associated with exaggerated effects.

Both elevation and lowering of blood sugar levels have been reported.

Concurrent administration of imipramine with electroshock therapy may increase the hazards; such treatment should be limited to those patients for whom it is essential.

Adverse Reactions: *Cardiovascular:* Hypotension, hypertension, tachycardia, palpitation, myocardial infarction, arrhythmias, heart block, stroke, falls.

Psychiatric: Confusional states (especially in the elderly) with hallucinations, disorientation, delusions; anxiety, restlessness, agitation; insomnia and nightmares; hypomania; exacerbation of psychosis.

Neurological: Numbness, tingling, paresthesias

of extremities; incoordination, ataxia, tremors; peripheral neuropathy; extrapyramidal symptoms; seizures, alterations in EEG patterns; tinnitus.

Anticholinergic: Dry mouth, and, rarely, associated sublingual adenitis; blurred vision, disturbance of accommodation, mydriasis; constipation, paralytic ileus; urinary retention, delayed micturition, dilation of the urinary tract.

Allergic: Skin rash, petechiae, urticaria, itching, photosensitization (avoid excessive exposure to sunlight); edema (general or of face and tongue), drug fever, cross-sensitivity with desipramine.

Hematologic: Bone marrow depression including agranulocytosis; eosinophilia; purpura; thrombocytopenia. Leukocyte and differential count should be performed in any patient who develops fever and sore throat during therapy; the drug should be discontinued if there is evidence of pathological neutrophil depression.

Gastrointestinal: Nausea and vomiting, anorexia, epigastric distress, diarrhea; peculiar taste, stomatitis, abdominal cramps, black tongue.

Endocrine: Gynecomastia in the male; breast enlargement and galactorrhea in the female; increased or decreased libido, impotence; testicular swelling; elevation or depression of blood sugar levels.

Other: Jaundice (simulating obstructive); altered liver function; weight gain or loss; perspiration; flushing; urinary frequency; drowsiness, dizziness, weakness and fatigue; headache; parotid swelling; alopecia.

Withdrawal Symptoms: Though not indicative of addiction, abrupt cessation of treatment after prolonged therapy may produce nausea, headache and malaise.

How Supplied: Round tablets of 25 and 50 mg., triangular tablets of 10 mg., for geriatric and adolescent use; and ampuls, each containing 25 mg. in 2 cc. for I.M. administration. (B)98-146-850-H (7/77)

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Ardley, New York 10502





When you select this familiar antibiotic for IV infusion you have available a broad dosage range that hospitalized patients may need.

Intravenous Lincocin (lincomycin hydrochloride, Upjohn), with its 1.2 to 8 grams/day dosage range, covers many serious and even life-threatening infections. Lincocin is effective in infections due to susceptible strains of streptococci, pneumococci, and staphylococci. Lincocin IV therefore can be as useful in your hospitalized patients as its IM use has proved to be in your office patients. As with all antibiotics, *in vitro* susceptibility studies should be performed.

1.2 to 8 grams/day IV dosage range:

Most hospitalized patients with uncomplicated pneumonias respond satisfactorily to 1.2 to 1.8 grams/day of Lincocin IV. These doses may have to be increased for more serious infections.

In life-threatening situations as much as 8 grams/day has been administered intravenously to adults.

In usual IV doses, Lincocin (lincomycin hydrochloride, Upjohn) should be diluted in 250 ml or more of normal saline solution or 5% glucose in water. But when 4 grams or more per day is given, Lincocin should be diluted in not less than 500 ml of either solution, and the rate of administration should not exceed 100 ml/hour. Too rapid intravenous administration of doses exceeding 4 grams may result in hypotension or, in rare instances, cardiopulmonary arrest.

Effective gram-positive antibiotic:

Lincocin IV is effective in respiratory tract, skin and soft-tissue, and bone



infections caused by susceptible strains of pneumococci, streptococci, and staphylococci, including penicillin-resistant strains. Staphylococcal strains resistant to Lincocin (lincomycin hydrochloride, Upjohn) have been recovered. Before initiating therapy, culture and susceptibility studies should be performed. Lincocin has proved valuable in treating patients hypersensitive to penicillin or cephalosporins, since Lincocin does not share antigenicity with these compounds. However, hypersensitivity reactions have been reported, some of these in patients known to be sensitive to penicillin.

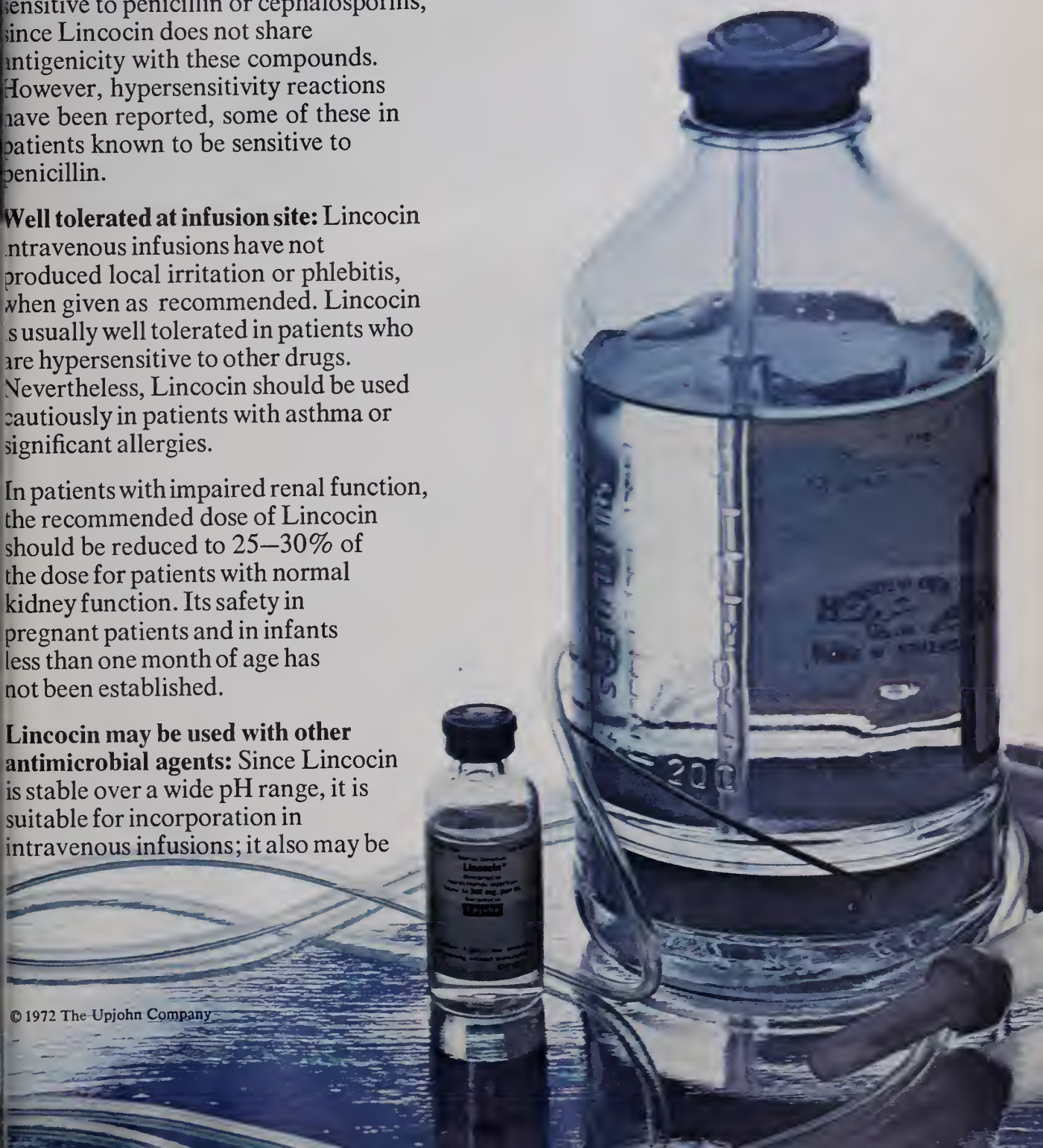
Well tolerated at infusion site: Lincocin intravenous infusions have not produced local irritation or phlebitis, when given as recommended. Lincocin is usually well tolerated in patients who are hypersensitive to other drugs. Nevertheless, Lincocin should be used cautiously in patients with asthma or significant allergies.

In patients with impaired renal function, the recommended dose of Lincocin should be reduced to 25–30% of the dose for patients with normal kidney function. Its safety in pregnant patients and in infants less than one month of age has not been established.

Lincocin may be used with other antimicrobial agents: Since Lincocin is stable over a wide pH range, it is suitable for incorporation in intravenous infusions; it also may be

administered concomitantly with other antimicrobial agents when indicated. However, Lincocin should not be used with erythromycin, as *in vitro* antagonism has been reported.

Lincocin[®]
Sterile Solution (300 mg per ml)
(lincomycin hydrochloride, Upjohn)
For further prescribing information, please see following page.





● Sterile Solution (300 mg. per ml.) ●

Lincocin[®]

(lincomycin hydrochloride, Upjohn)

Up to 8 grams per day by IV infusion for
hospitalized patients with life-threatening infections.
Lincocin is effective in infections due to
susceptible strains of streptococci, pneumococci,
and staphylococci. As with all antibiotics,
in vitro susceptibility studies should be performed.

Each
preparation
contains:

Lincomycin
hydrochloride
monohydrate
equivalent to
lincomycin base

250 mg Pediatric Capsule 250 mg
500 mg Capsule 500 mg
*Sterile Solution per 1 ml 300 mg
Syrup per 5 ml 250 mg
*Contains also: Benzyl Alcohol 9 mg; and,
Water for Injection—q.s.

Lincocin (lincomycin hydrochloride) is indicated in infections due to susceptible strains of staphylococci, pneumococci, and streptococci. *In vitro* susceptibility studies should be performed. Cross resistance has not been demonstrated with penicillin, ampicillin, cephalosporins, chloramphenicol or the tetracyclines. Some cross resistance with erythromycin has been reported. Studies indicate that Lincocin does not share antigenicity with penicillin compounds.

CONTRAINDICATIONS: History of prior hypersensitivity to lincomycin or clindamycin. Not indicated in the treatment of viral or minor bacterial infections.

WARNINGS: CASES OF SEVERE AND PERSISTENT DIARRHEA HAVE BEEN REPORTED AND HAVE AT TIMES NECESSITATED DISCONTINUANCE OF THE DRUG. THIS DIARRHEA HAS BEEN OCCASIONALLY ASSOCIATED WITH BLOOD AND MUCUS IN THE STOOLS AND HAS AT TIMES RESULTED IN AN ACUTE COLITIS. THIS SIDE EFFECT USUALLY HAS BEEN ASSOCIATED WITH THE ORAL DOSAGE FORM BUT OCCASIONALLY HAS

BEEN REPORTED FOLLOWING PARENTERAL THERAPY. A careful inquiry should be made concerning previous sensitivities to drugs or other allergens. Safety for use in pregnancy has not been established and Lincocin (lincomycin hydrochloride) is not indicated in the newborn. Reduce dose 25 to 30% in patients with severe impairment of renal function.

PRECAUTIONS: Like any drug, Lincocin should be used with caution in patients having a history of asthma or significant allergies. Overgrowth of nonsusceptible organisms, particularly yeasts, may occur and require appropriate measures. Patients with pre-existing monilial infections requiring Lincocin therapy should be given concomitant antimonilial treatment. During prolonged Lincocin therapy, periodic liver function studies and blood counts should be performed. Not recommended (inadequate data) in patients with pre-existing liver disease unless special clinical circumstances indicate. Continue treatment of β -hemolytic streptococci infections for 10 days to diminish likelihood of rheumatic fever or glomerulonephritis.

ADVERSE REACTIONS: *Gastrointestinal*—Glossitis, stomatitis, nausea, vomiting. Persistent diarrhea, enterocolitis, and pruritus ani. *Hemopoietic*—Neutropenia, leukopenia, agranulocytosis, and thrombocytopenic purpura have been reported. *Hypersensitivity reactions*—Hypersensitivity reactions such as angioneurotic edema, serum sickness, and anaphylaxis have been reported, sometimes in patients sensitive to penicillin. If allergic reaction occurs, discontinue drug. Have epinephrine, corticosteroids, and antihista-

mines available for emergency treatment
Skin and mucous membranes—Skin rashes, urticaria, vaginitis, and rare instances of exfoliative and vesiculobullous dermatitis have been reported. *Liver*—Although no direct relationship to liver dysfunction is established, jaundice and abnormal liver function tests (particularly serum transaminase) have been observed in a few instances. *Cardiovascular*—Instances of hypotension following parenteral administration have been reported, particularly after too rapid IV administration. Rare instances of cardiopulmonary arrest have been reported after too rapid IV administration. If 4.0 grams or more administered IV, dilute in 500 ml of fluid and administer no faster than 100 ml per hour. *Special senses*—Tinnitus and vertigo have been reported occasionally. *Local reactions*—Excellent local tolerance demonstrated to intramuscularly administered Lincocin (lincomycin hydrochloride). Reports of pain following injection have been infrequent. Intravenous administration of Lincocin in 250 to 500 ml of 5% glucose in distilled water or normal saline has produced no local irritation or phlebitis.

HOW SUPPLIED: 250 mg and 500 mg Capsules—bottles of 24 and 100. *Sterile Solution*, 300 mg per ml—2 and 10 ml vials and 2 ml syringe. *Syrup*, 250 mg per 5 ml—60 ml and pint bottles.

For additional product information, consult the package insert or see your Upjohn representative.

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The Upjohn Company
Kalamazoo, Michigan 49001

Upjohn

Health Job Clinic A Success

A health job clinic developed to encourage health professionals to consider practicing in the rural areas of the state brought nearly 1,000 students from all over Oklahoma to hear what the communities had to sell. Sponsored by the Oklahoma Council for Health Careers, the clinic had 70 booths offering health professionals some type of opportunity.

Towns ranging in size from 1,000 to over 50,000 people and from as far away as the Southeast corner in the Panhandle offered information on the living environment, health facilities and needs, opportunities and advantages of living in small town Oklahoma.

Held during the first week of November, the clinic actually began the day before when the communities arrived to assemble their booths and to hear some ideas on recruiting health manpower and how to make their areas appeal to medical personnel. Three physicians spoke to the community groups on the first day. Howard Keith, MD, from Shattuck, admonished the communities not to wait for the government or someone else to go out and recruit health manpower for them. He suggested that some of the smaller towns get together and build a central hospital or facility to attract a number of doctors to their communities.

Kelly West, MD, professor at the University of Oklahoma Health Sciences Center, ended the conference by discussing some of the manpower problems facing rural Oklahoma. He pointed out that the days of solo practice in rural communities were swiftly ending.

"Rural America has to develop a base of medical facilities and services which will attract the physicians," he explained. He went on to suggest cooperative medical practices and told the communities they could no longer expect today's doctors to serve alone and practice "19th century medicine where the old family doctors sat up and held your hand all night while your appendix burst."

Leonard P. Eliel, MD, Executive Vice-President of the Health Sciences Center explained that the health job clinic expressed a great need, the deeply felt need for adequate health care for the people of the state.

Governor David Hall opened the job placement activities at an early breakfast honoring the community representatives. He commended the job clinic on taking "dead aim at the health care delivery problems of this state." He said he could see no greater challenge than that of locating health professionals where they are most needed. He stated that health care delivery and education were his number one interest in Oklahoma, and his aim was to have health care delivery within a one-hour drive of every citizen in the state. □

Chinese Medicine An Unknown Quantity

Chinese medicine may offer possibilities for application in the Western world, but these possibilities are still an unknown quantity — unknown to the Chinese and the Western counterparts as well.

This was the finding of a Missouri physician, E. Gray Dimond, MD, of the University of Missouri at Kansas City, following a second trip to China this fall to study Chinese medicine. Doctor Dimond was one of the small group of American physicians who journeyed to China in the fall of 1971 for a similar study.

In the November 27th issue of the *Journal of the American Medical Association* Doctor Dimond reported that although acupuncture analgesia permits major surgical procedures, it is not uniformly successful. He went on to say that the Chinese themselves do not have a scientific explanation for acupuncture analgesia.

Therapeutic acupuncture is even more obscure and has large psychosomatic probabilities. Never the less Doctor Dimond believes that the method has a place in treatment of some disorders.

Traditional Chinese herbal medicine is still being taught, but its role is undergoing methodical scientific research. According to the physician investigator this research would be acceptable by western standards.

Chinese medical schools have a large number of the so-called "bare-foot doctors" in their new classes. The doctor feels that this might be a lesson for the United States medical educators to provide opportunities for allied health personnel, such as physician's assistants, to move up to become physicians. □

State Health Department Named OSHA Record Keeping Agency

According to the State Commissioner of Health the Oklahoma State Department of Health has been designated as the agency responsible for record keeping in Oklahoma for the Occupational Safety and Health Administration.

R. Leroy Carpenter, MD, Health Commissioner, named the Public Health Statistics Division of the Department as the responsible agency in Oklahoma. Officially known as Public Law 91-596, the Williams-Steiger Occupational Safety and Health Act of 1970 affects any physician who employs one or more workers.

Details of the act can be found in a booklet entitled "Handy Reference Guide to the Williams-Steiger Occupational Safety and Health Act of 1970." This booklet along with all necessary posters and forms can be obtained from the Department's Public Health Statistics Division.

Under the act, each employer must display a poster which cites provisions of the law, responsibilities of employers and employees, and penalties.

Anyone having any questions about the record keeping portion of OSHA can contact Mr. P. J. Pinkerton, with the state health department's Public Health Statistics Division. Telephone area code 405, 427-6561 Extension 16.

Other questions regarding OSHA should be directed to the Department of Labor, Room 512, Petroleum Building, 420 South Boulder, Tulsa, Oklahoma 74103. □

Miscellaneous Advertisements

COMPLETE 200 MA. X-Ray facility including dark room, cassettes, leaded shield and dryer \$3,000.00 Firm. Contact R. W. Dowdell, MD, 405 781-3915 or 946-6960. Also complete codaphone system with remote transmitter \$495.00.

PHYSICIANS WANTED. Planning to build multi-suite Professional Mall in Weatherford, Oklahoma, a friendly fast growing college city; will build to suit. Need Two MDs. Write T. J. Toma, DDS, Box 310, Weatherford 73096. □

Oklahoma was represented at the Fall Conference by Mrs. Port Johnson, President and Mrs. Daniel R. Storts, President-elect. Mrs. Virgil Ray Forester, Oklahoma City, is the Southern Regional Vice-President of WAAMA.

On Sunday evening, Regional get-acquainted dinners were held, followed by a presentation of films available through the AMA.

Monday, we were privileged to hear a variety of distinguished guest speakers. William Purkey, MD, Professor of Education, University of Florida, pointed out that too many times we carry misconcepts of ourselves throughout our lives. He gave these truths: you cannot give what you do not possess yourself. To respect others, you must respect yourself; to value others, you must value yourself; to love others, you must love yourself.

Miss Minnie Allen, U.S. Department of Agriculture spoke on Volunteers for Food Assistance Programs. She gave tips on 'creativity and horsepower' which leaders must exhibit.

Robert Kernodle, MD, Chairman AMA Board of Trustees, praised the auxiliary for their successful support of A.M.A.E.R.F. projects. He brought three challenges from the AMA: 1. Preserve the rights and privileges of individuals in medicine through strength and unity. 2. Get politically involved in this November election. 3. Work to update and educate people in health education.

Norman H. Booher, MD, Vice-chairman, AMA Council on Voluntary Health Agencies, presented six points of possible cooperative effort between the Council and auxiliary. 1. Formalize an auxiliary committee on Voluntary Health Agencies. 2. The chairmen met with AMA Council annually. 3. Familiarize ourselves with Voluntary Health Agencies. 4. Urge State Medical Societies to form a like committee. 5. Maintain liaison with National and State organized medicine.

6. Involve auxiliary members in Voluntary Health Agencies.

The remainder of the Conference was spent getting leadership pointers and valuable up-to-date information from every conceivable area of Medical Auxiliary. A.M.A.E.R.F.; I.H.A.; Health Education; Bylaws; Historian responsibilities; Parliamentary procedures; Treasurer data; Health Manpower; Health Services and Membership.

I cannot close the events of this conference without relating the "fun" side. Upon registering, we were assigned to the 'blue' or the 'red' team. Sunday and Monday we were led through and participated in the stages of a "Mock Election." The blue team was 'conservative' and the 'red' team was more 'liberal'. The climax Monday evening was an actual election for the "First Congressional District of Drake (Hotel)." An added extra was a vote for Nixon or McGovern.

Mary Ellen Storts

P.S. The conservative team won the election!

HEALTH EDUCATION

Health Education has been defined as "translating what is known into what is done about health." Nutrition education will help raise the nutritional standards for all Americans, improving their "Quality of Life."

Our nutritional needs might be divided as: an infant, a child, an adolescent, an adult, during pregnancy, and as an aging adult. Though varying during each stage, maintenance of good health depends on good nutrition in each.

The new AMA Auxiliary packet on Nutrition is available now from your Oklahoma Health Education chairman, Mrs. Harvey Randall, Route 5, 3500 Jefferson, Muskogee, Oklahoma 74401.

It contains ideas and planned methods for introducing nutrition education into your community through your auxiliary's efforts.

Be a catalyst! Mrs. Harvey Randall, Health Education Chairman. □

The Price Commission has opened one avenue for fee increases. It recently ruled that higher fees are justified when physicians attain board certification. It advised a newly certified urologist that he could establish a new base fee structure at the level of average base fees charged by other board certified urologists in his area. Board certification is a "highly significant professional attainment which substantially increases the physician's professional status and the value of his services," the Commission said.

Failure of the 92nd Congress to act on Senator Kennedy's HMO bill forestalled a massive federal takeover of the medical malpractice field. A little noticed provision of the Kennedy bill would have established a federal malpractice reinsurance program to be administered by a Commission on Quality Health Care Assurance. The Commission would also have set medical standards, prescribed control systems, evaluated utilization and health care outcomes, issued, revoked or suspended certificates for provider complaints, monitored reports, and conducted research and development programs for assessing and comparing health care delivery.

Why is the federal budget so difficult to balance? When asked, Representative Herman T. Schneebeli (R-Pa.) replied, "There is no proper coordination between the tax writing committee and the spending committee . . . we don't have this coordinated action between the two. There is nobody on top to tell these fellows to get together. We should do the same as the Board of Directors of any large company—get figures from the comptroller or treasurer and decide what we are going to spend; how much more income we are going to need."

On the same subject, the National Chamber of Commerce has suggested to the President and Congress that the government be put on a strict diet. They pointed out that in 1970, Americans spent \$14 billion more for government than for food, shelter, clothing and new cars combined. Recommended reforms include (1) project all major spending over a five-year period; (2) evaluate all

spending programs at least once every three years; (3) pilot test every proposed major federal program; (4) designate a joint congressional committee to evaluate the federal budget in terms of priorities; and (5) subject special federal programs, such as Social Security, Medicare and highways, to the discipline of controlled spending just as other tax supported programs are.

Special phone service for physicians seeking information or guidance on Phase II price controls is being provided by the AMA. Just call (312) 527-1571, Extension 434, and ask for Robert Walsh of the AMA Center for Health Services Research and Development. After closing hours messages will be recorded so that call back answers can be made.

If you think Phase II, Medicare, Medicaid, and Health Maintenance Organizations are complicated . . . don't get involved with OSHA. The Occupational Safety and Health Act is rapidly becoming a bureaucratic nightmare. One regulation requires that in any office or premise where both sexes are employed, there must be separate toilet facilities. This edict has been invoked in an office where there was only two persons, a man and his wife, working on the premises. Other regulations held an employer responsible for the actions of his employees. As an example, if an employee is to spit on the floor of a garage, factory, or other premises, his employer can be subjected to a substantial fine. He is also financially liable if an employee's personal tools, such as carried by carpenters, are found below rigidly prescribed standards. There are others that are even more nit picking. One regulation requires that all toilet cubicles must be provided with coat hangers. □

Librium® and (chlordiazepoxide HCl) concomitant use

Librium (chlordiazepoxide HCl) is used as adjunctive antianxiety therapy concomitantly with certain specific medications of other classes of drugs, such as cardiac glycosides, anti-hypertensive agents, diuretics, anticholinergics and antacids.

Antianxiety effectiveness: Demonstrated in a broad range of psychologic and physical dysfunctions; indicated when reassurance and counseling

are not enough and until, in the physician's judgment, anxiety has been reduced to tolerable, appropriate levels.

Effect on mental acuity: Usually minimal on proper maintenance dosage.

Safety: An excellent clinical record. In general use, the most common side effects reported have been drowsiness, ataxia and confusion, particularly in the elderly and debilitated.

**in relief of clinically
significant anxiety**

Librium®
(chlordiazepoxide HCl)

**5-mg, 10-mg, 25-mg capsules
up to 100 mg daily in
severe anxiety**

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OF MEDICINE

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Relief of anxiety and tension occurring alone or accompanying various disease states.

Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.

Precautions: In the elderly and debili-

tated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the

elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

Supplied: Librium® capsules containing 5 mg, 10 mg or 25 mg chlordiazepoxide HCl. Libritabs® tablets containing 5 mg, 10 mg or 25 mg chlordiazepoxide.



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